Access DB# 101001

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 11-30-04
Art Unit: 1752 Phone Number 30 2-1333 Serial Number: 10/[redacted] 820,117
Mail Box and Bldg/Room Location: 9564 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Please see Bib Sheet DEC

Inventors (please provide full names): Pat & TM C

Earliest Priority Filing Date:

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the ~~first~~ Polymer of Claim #1

If too many, then you can

Cross with photo acid generator

~~or with the second polymer~~

IBM (OCP)

****

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Searcher: EJ
Searcher Phone #:
Searcher Location:
Date Searcher Picked Up:
Date Completed: 12-9-04
Searcher Prep & Review Time:
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Type of Search

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AA Sequence (#)
Structure (#)
Bibliographic
Litigation
Fulltext
Patent Family
Other

Vendors and cost where applicable

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Dialog
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet
Other (specify)

PTO-1590 (8-01)

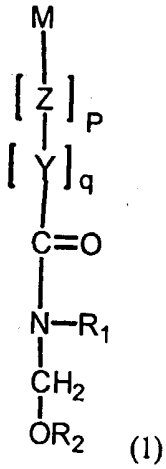
Claims

What is claimed is:

1. A negative photoresist composition, comprising:

(a) a radiation sensitive acid generator;

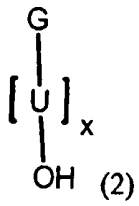
(b) a first polymer comprising a repeating unit from a first monomer (1), wherein the first monomer (1) has the structure:



(1)

and

(c) a second polymer comprising a repeating unit from a second monomer (2), wherein the second monomer (2) has the structure:



(2)

wherein G and M independently are polymerizable backbone moieties,

wherein Z is a linking moiety comprising one of -C(O)O-, -C(O)-, -OC(O)-, -O-C(O)-C(O)-O-,

wherein Y is one of an alkylene group with 1 to 60 carbons, an arylene group with 6 to 60 carbons, a semi- or perfluorinated alkylene group with 1 to 60 carbons, a semi- or perfluorinated arylene group with 6 to 60 carbons,

wherein U is one of an alkylene group with 1 to 60 carbons, an arylene group with 6 to 60 carbons, a semi- or perfluorinated alkylene group with 1 to 60 carbons, a semi- or perfluorinated arylene group with 6 to 60 carbons, -C(O)O-R, -C(O)-R, -OC(O)-R, -O-C(O)-C(O)-O-R, where R represents one of an alkylene group with 1 to 60 carbons, an arylene group with 6 to 60 carbons, a semi- or perfluorinated alkylene group with 1 to 60 carbons, a semi- or perfluorinated arylene group with 6 to 60 carbons,

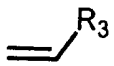
wherein p, q, and x are independently 0 or 1,

wherein R_1 and R_2 independently comprise one of hydrogen and a straight or branched alkyl group with 1 to 6 carbons,

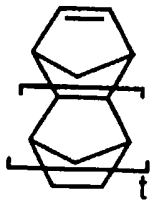
wherein the acid generator is adapted to generate an acid upon exposure to imaging radiation characterized by a wavelength, and

wherein the resist composition is soluble in an aqueous alkaline developer solution before exposure to the imaging radiation, and is insoluble in the aqueous alkaline developer solution after exposure to the imaging radiation.

2. The negative photoresist composition of claim 1, wherein the polymerizable backbone moiety, M and G, independently includes one of an acrylic structure and a cyclic olefinic structure, wherein the acrylic structure is:



wherein R_3 represents one of hydrogen, an alkyl group of 1 to 20 carbons, a semi- or perfluorinated alkyl group of 1 to 20 carbons, and CN, and wherein the cyclic olefinic structure is:



wherein t is an integer from 0 to 3.

3. The composition of claim 1, wherein the first polymer having the repeating unit from the first monomer (1) further comprises an aqueous base soluble moiety.

4. The composition of claim 3, wherein the aqueous base soluble moiety comprises one of a fluorosulfonamide, a carboxylic acid, and a fluoroalcohol.

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BIBDATASHEET

Bib Data Sheet

CONFIRMATION NO. 8647

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/820,117	04/07/2004 RULE	430	1752	FIS920030394US1

APPLICANTS

Wenjie Li, Poughkeepsie, NY;

Pushkara R. Varanasi, Poughkeepsie, NY;

** CONTINUING DATA **********

** FOREIGN APPLICATIONS **********

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 06/18/2004

Foreign Priority claimed ☐ yes ☐ no 35 USC 119 (a-d) conditions met ☐ yes ☐ no ☐ Met after Allowance Verified and Acknowledged Examiner's Signature Initials	STATE OR COUNTRY NY	SHEETS DRAWING 3	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 2

ADDRESS
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12033

TITLE
Negative photoresist and method of using thereof

FILING FEE RECEIVED	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue)

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L7            2 S L6 AND L2
L8           54 S L6 AND L2 FUL
                SAV L8 LEE117/A

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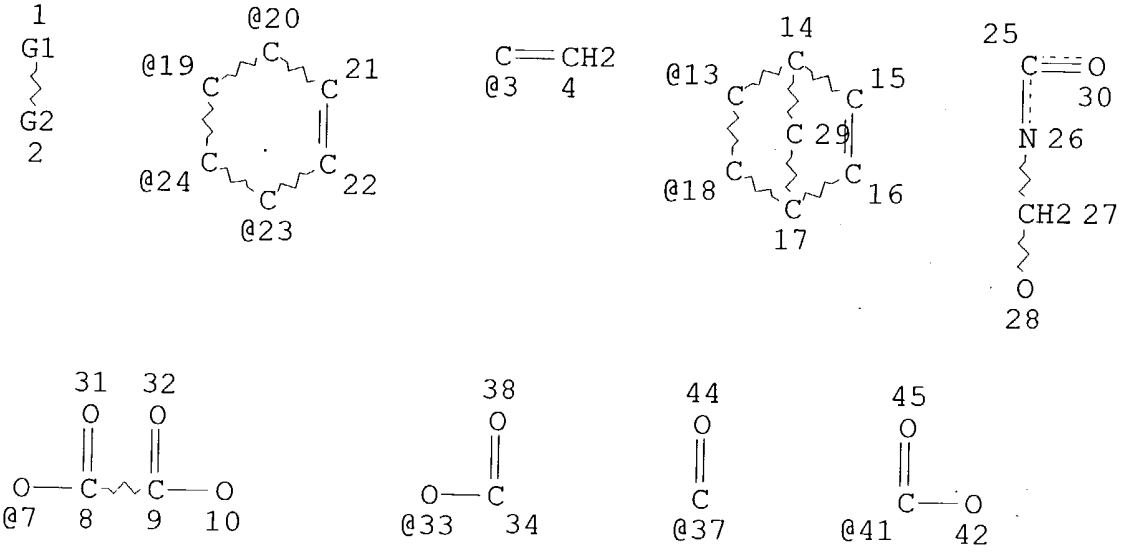

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE
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L9 ANSWER 1 OF 27 ZCA COPYRIGHT 2004 ACS on STN
140:190005 Light- or heat-sensitive image forming materials for lithographic printing plate precursors. Kunita, Kazuto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004045626 A2 20040212, 129 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-201433 20020710.

AB The title material has a layer contg. polymers having radically polymerizable groups of <1.5 mmol/g acid value and a polymer, which is alkali-solubilizable and has .gtoreq.1.5 mmol/g acid value and general structure -C(1)=C(R2)(R3) (R1-3 = H, hydrocarbon), on a support. The material shows high sensitivity and good storageability and is also suitable for other applications such as relief image forming, holog., color proof material, etc.

IT **658050-92-1P**
(light- or heat-sensitive image forming materials for lithog. printing plate precursors)

RN 658050-92-1 ZCA

CN 2-Propenoic acid, 2-methyl-, polymer with [(2-methyl-1-oxo-2-propenyl)imino]bis(methylene) bis(2-methyl-2-propenoate) and N,N,2-trimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 657414-41-0
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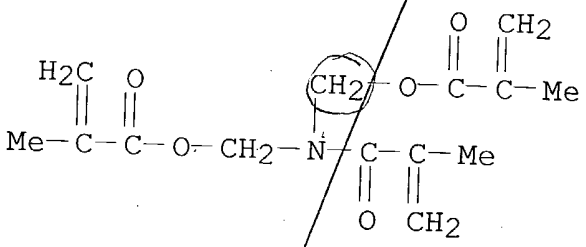
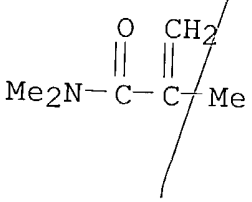


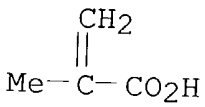
CM 2

CRN 6976-91-6
CMF C6 H11 N O



CM 3

CRN 79-41-4
CMF C4 H6 O2



IT **658050-92-1P**
(light- or heat-sensitive image forming materials for lithog. printing plate precursors)

L9 ANSWER 2 OF 27 ZCA COPYRIGHT 2004 ACS on STN
140:190004 Light- or heat-sensitive image forming materials for lithographic printing plate precursors. Kunita, Kazuto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004045625 A2 20040212, 124 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-201432 20020710.

AB The title compn. contains a polymer having radically polymerizable groups and a polymer alkali-solubilizable. The material shows high sensitivity and good storageability and is also suitable for other applications such as relief image forming, holog., color proof material, etc.

IT **657414-42-1P**
(polymers in light-sensitive image forming materials)

RN 657414-42-1 ZCA

CN 2-Propenoic acid, 2-methyl-, polymer with N,2-dimethyl-2-propenamide and [(2-methyl-1-oxo-2-propenyl)imino]bis(methylene) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

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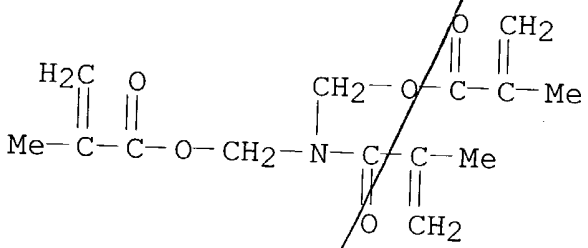
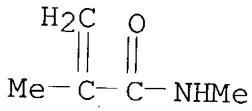
CRN 657414-41-0
CMF C14 H19 N O5



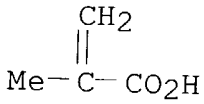
CM 2

CRN 3887-02-3
CMF C5 H9 N O



CM 3

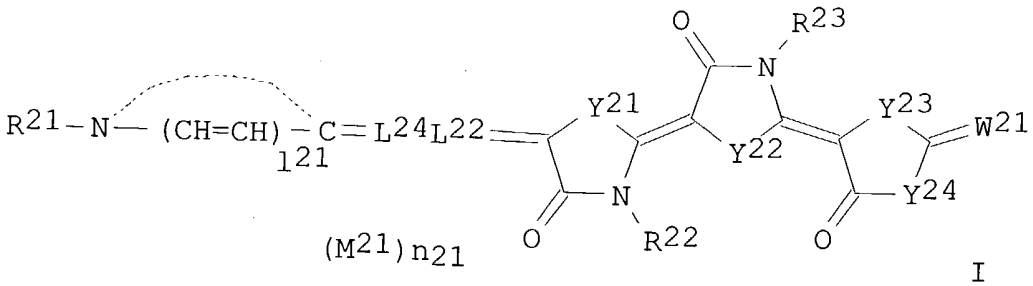
CRN 79-41-4
CMF C4 H6 O2



IT **657414-42-1P**
(polymers in light-sensitive image forming materials)

L9 ANSWER 3 OF 27 ZCA COPYRIGHT 2004 ACS on STN
139:140883 Silver halide photographic films for lithographic printing plate making and method for development therefor. Fukawa, Junichi (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2003215745 A2 20030730, 76 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-12914 20020122.

GI



I

AB The title silver halide photog. film has light-sensitive silver halide photog. emulsion layers and hydrophilic colloidal layer on a support, wherein the silver halide photog. emulsion layer contains spectral sensitizing dye having general formula I (Y21-24 = -O_, -S-,-Sc-, etc.; R21 = C.gtoreq.8 aliphatics having

water-solubilizing group; R22-24 = aliphatics, aryl, heterocyclics; Z21 = 5- or 6-membered ring residue; W21 = O, S, =N(Ar); Ar = arom. ring, heterocyclic ring; L21-22 = methine; l21 = 0,1; M21 = counter ion; n21 = counter ion no.) or II(Y25-27 =-O-, -S-, -Se-, etc.; R26-29 = aliphatics, aryl heterocyclic ring; Z22 = N-contg. heterocyclic ring residue; L23-24 = methine; M22 = counter ion; n22 = counter ion no.) and wherein a fluoro surfactant contg. repeating units [-C(R1)(COO-L1-Rf)-CH2]m and [-C(R2)(COO-L2-Xp)-CH2-]n (Rf = aliph. group having F; L1-2 =connecting group; X = H, OH, anion, etc.; R1-2 = H, lower alkyl; m+n = 1, 0; p.gtoreq.1 integer) is disposed in the silver halide emulsion layer and the hydrophilic colloidal layer. The photog. film shows little soiling during the development.

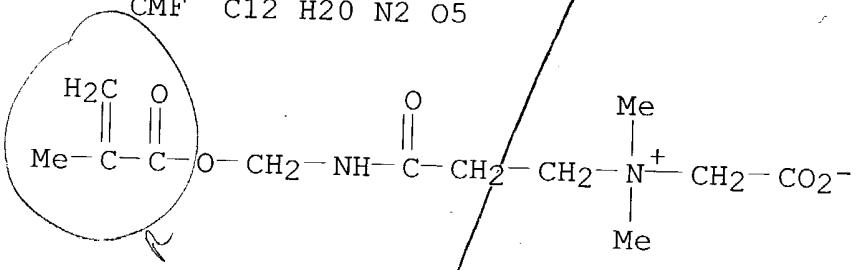
IT **569346-52-7**
(fluoro surfactant)

RN 569346-52-7 ZCA

CN 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]-3-oxo-, inner salt, polymer with 3-[(nonafluorobutyl)amino]-3-oxopropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

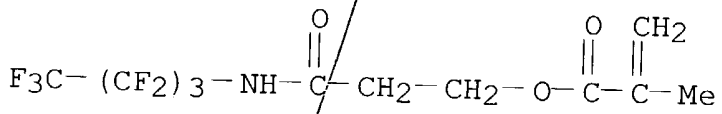
CM 1

CRN 569346-51-6
CMF C12 H20 N2 O5



CM 2

CRN 463311-92-4
CMF C11 H10 F9 N O3



IT **569346-52-7**
(fluoro surfactant)

L9 ANSWER 4 OF 27 ZCA COPYRIGHT 2004 ACS on STN

137:286341 Method of processing of black-and-white silver halide photographic material. Uchihiro, Shinji (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2002287290 A2 20021003, 26 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-92743 20010328.

AB The black-and-white silver halide photog. material contains R1-(O-R2)k-L1-(X1)l (R1 = F-substituted alkyl, aryl, alkenyl; R2 = alkylene substituted by .gtoreq.1 F; L1 = bonding group; X1 = OH, anionic, cationic group; k = integer 1-10; and l = integer 1-3) and [(R3O)n-(PFC)-CO-Y]m-L2-(X2)p (R3 = C1-4 perfluoroalkyl; n = integer 1-5; PFC = perfluorocycloalkane residue; Y = O- or N-contg. bonding group; L2 = bonding group; X2 = water-sol. polar group; m = integer 1-3; and p = integer 1-5) in .gtoreq.1 layer and a rinsing or stabilizing step is carried out in multiple tanks. The black-and-white silver halide photog. material further contains a polymer made up of units [CR5(COOL3R4)CH2]q and [CR6(COOL4(X3)s)CH2]r (R4 = alkyl contg. .gtoreq.1 F; L3,4 = bonding group; X3 = H, OH, dipolar group; R5,6 = H, lower alkyl; q, r = polymn. mol ratio; q + r = 1.0; and s = integer .gtoreq.1) in .gtoreq.1 layer. The black-and-white silver halide photog. material is processed by a fixing soln. virtually free of Al, compds. thereof, ammonia, and compds. thereof.

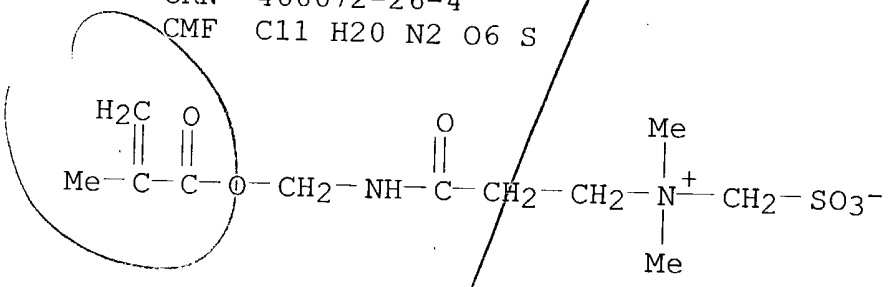
IT **466672-27-5**
(processing of black-and-white silver halide photog. material contg.)

RN 466672-27-5 ZCA

CN 1-Propanaminium, N,N-dimethyl-3-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]-3-oxo-N-(sulfomethyl)-, inner salt, polymer with 2-[2-[(1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

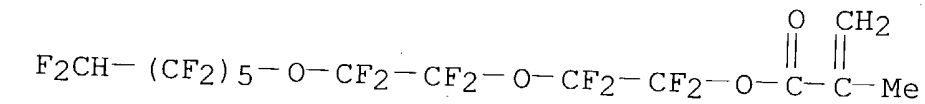
CM 1

CRN 466672-26-4
CMF C11 H20 N2 O6 S



CM 2

CRN 443906-98-7
CMF C14 H6 F20 O4



IT **466672-27-5**
(processing of black-and-white silver halide photog. material contg.)

L9 ANSWER 5 OF 27 ZCA COPYRIGHT 2004 ACS on STN
137:286340 Method for processing silver halide photographic films using developer containing ascorbic acid derivative and photographic film containing fluoro surfactant. Uchihiro, Shinji (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2002287285 A2 20021003, 24 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-85036 20010323.

AB The title method for processing silver halide photog. films by automated processing app. equipped with a developer tank, a fixing tank, and a washing tank uses a photog. film contains an agent, which has structure Rf-(O-RF')n-L-Xm (RF = F-contg. alkyl, aryl, alkenyl; Rf' = f-contg. alkylene; n,m .gtoreq.1 integer; L = single bond, 2-valent connecting group; X = OH, anionic group, cationic group) or [(RfO)n-(PCF)-CO-Y]k-L-Xm(Rf = C1-4 perfluoroalkyl; n = 1-5 integer; PFC = perfluorocycloalkylene; Y = connecting group contg. O or N; X = anionic, cationic, nonionic, or amphoteric group) and a developer soln. contg. ascorbic acid deriv. for preventing silver sludge generation. The method generates decreased amt. of silver sludge and little soiling on processing films and is suited for automated photog. processing.

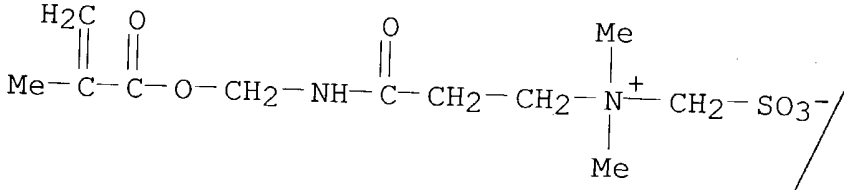
IT **466672-27-5**
(fluoro surfactant in photog. film; method for processing silver halide photog. films)

RN 466672-27-5 ZCA

CN 1-Propanaminium, N,N-dimethyl-3-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]-3-oxo-N-(sulfomethyl)-, inner salt, polymer with 2-[2-[(1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 466672-26-4
CMF C11 H20 N2 O6 S



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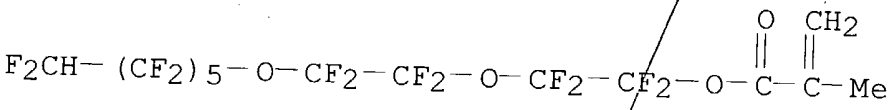

IT **466672-27-5**
(fluoro surfactant in photog. film; method for processing silver halide photog. films)

L9 ANSWER 6 OF 27 ZCA COPYRIGHT 2004 ACS on STN
135:350600 Heat-sensitive direct lithography original plate using improved binder polymers. Matsumoto, Katsuru; Mase, Hiroshi; Hirose, Sumio; Suzuki, Yuko; Sanada, Takayuki (Mitsui Chemicals Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2001310567 A2 20011106, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-127762 20000427.

AB The plate uses tridimensionally crosslinked hydrophilic binder polymers having formyl groups. The development-free plate has high printing durability and dimensional stability and does not produce development-derived waste.

IT **371254-63-6P 371254-64-7P**
(heat-sensitive direct lithog. original plate using crosslinked hydrophilic polymers having formyl groups)

RN 371254-63-6 ZCA
CN 2-Propenoic acid, (formylamino)methyl ester, polymer with 2-hydroxyethyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

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CRN 371254-62-5
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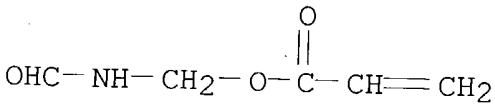

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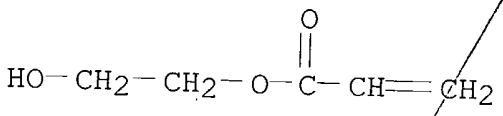
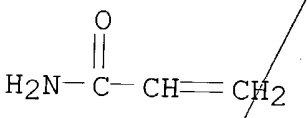


CM 3

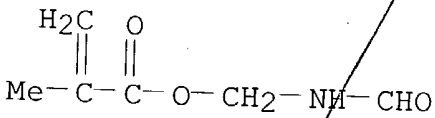
CRN 79-06-1
CMF C3 H5 N O



RN 371254-64-7 ZCA
CN 2-Propenoic acid, 2-methyl-, (formylamino)methyl ester, polymer with 2-hydroxyethyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

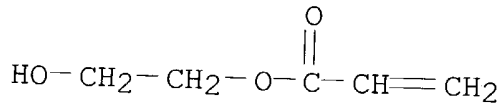
CM 1

CRN 86240-31-5
CMF C6 H9 N O3



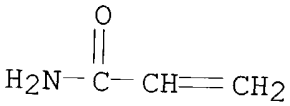
CM 2

CRN 818-61-1
CMF C5 H8 O3



CM 3

CRN 79-06-1
CMF C3 H5 N O



IT **371254-63-6P 371254-64-7P**
(heat-sensitive direct lithog. original plate using crosslinked hydrophilic polymers having formyl groups)

L9 ANSWER 7 OF 27 ZCA COPYRIGHT 2004 ACS on STN
129:276774 The synthesis and characterization of new polymerizable pyrimidines: immobilization of the monomers onto hydrophilic graft copolymeric supports through radiation-induced copolymerization-grafting. Pegiadou, S.; Guthrie, J. T.; Gill, M. H. (The Department of Chemistry, The University of Thessaloniki, Thessaloniki, 54006, Greece). Journal of Applied Polymer Science, 70(2), 211-218 (English) 1998. CODEN: JAPNAB. ISSN: 0021-8995. Publisher: John Wiley & Sons, Inc..

AB Polymerizable quaternary allylpyrimidinium salts, i.e., 1-allyl-4-amino-5-phenylpyrimidinium, 1-allyl-4-acetamido-5-phenylpyrimidinium, 1-allyl-5-hydroxymethylamino-5-phenylpyrimidinium, and 1-allylpyrimidinium bromides, as well as 4-acrylamido-5-phenylpyrimidines were synthesized and characterized. Three of the activated pyrimidine derivs., the two acrylamido and one allyl pyrimidine, were immobilized onto (Agar-g-co-HEMA)-X-TMPTA via graft copolymn. Each copolymer system, based on 2-hydroxyethyl methacrylate (HEMA) grafted onto agar followed by crosslinking with trimethyllopropane triacrylate (TMPTA), was prepd. by radiation-induced copolymn. carried out in the simultaneous mode. The release properties of the immobilized pyrimidines were assessed in various aq. media over a period of approx. 22 days.

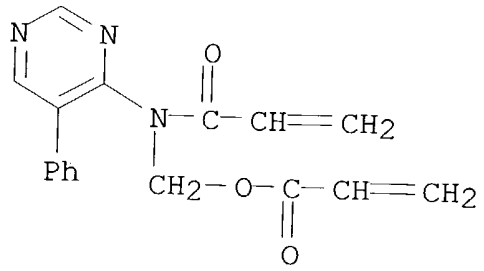
IT **213967-47-6P**
(immobilized on agar; prepn., polymn., immobilization, and release properties of pyrimidinium salts from graft polymers)

RN 213967-47-6 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl

di-2-propenoate, [(1-oxo-2-propenyl)(5-phenyl-4-pyrimidinyl)amino]methyl 2-propenoate and [[3-(1-oxo-2-propenyl)-5-phenyl-4(3H)-pyrimidinylidene]amino]methyl 2-propenoate (9CI) (CA INDEX NAME)

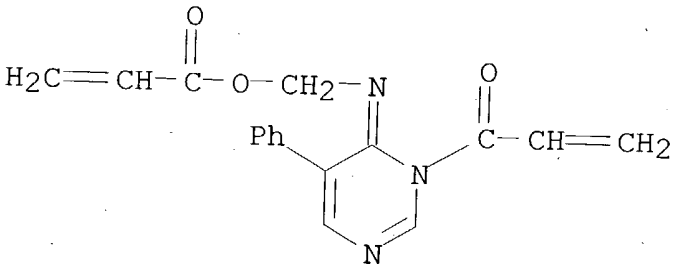
CM 1

CRN 213967-44-3
CMF C17 H15 N3 O3



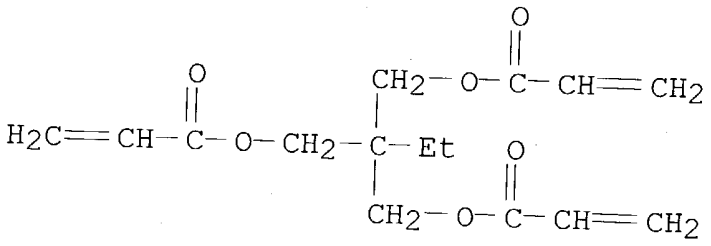
CM 2

CRN 213967-43-2
CMF C17 H15 N3 O3



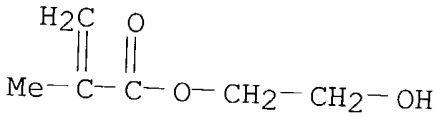
CM 3

CRN 15625-89-5
CMF C15 H20 O6



CM 4

CRN 868-77-9
CMF C6 H10 O3



IT **213967-47-6P**
(immobilized on agar; prepn., polymn., immobilization, and release properties of pyrimidinium salts from graft polymers)

L9 ANSWER 8 OF 27 ZCA COPYRIGHT 2004 ACS on STN
128:154062 Synthesis of hexahydro-1,3,5-triacryloyltriazine. Shirshin, K. V.; Kazantsev, O. A.; Danov, S. M. (Nizhnii Novgorod State Technical University (Dzerzhinsk Branch), Dzerzhinsk, 606026, Russia). Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii), 33(1), 113-116 (English) 1997. CODEN: RJOCEQ. ISSN: 1070-4280. Publisher: MAIK Nauka/Interperiodica Publishing.

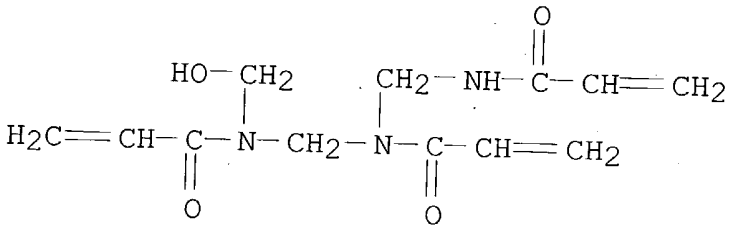
AB The yield of hexahydro-1,3,5-triacryloyltriazine in the reaction of acrylonitrile with trioxane is detd. by the ratio between the catalyst (sulfuric acid) and water present in the system. The reaction product is formed only with an excess of acid over water, but a large proportion of acid results in polymn. Deactivation of the catalyst in the presence of water and side polymn. can be explained by the formation of N-hydroxymethylamide derivs.

IT **202518-50-1P**
(prepn. of triacryloyltriazine)

RN 202518-50-1 ZCA
CN 2-Propenamide, N-[[(hydroxymethyl)(1-oxo-2-propenyl)amino]methyl]-N-[[(1-oxo-2-propenyl)amino]methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 202518-49-8
CMF C12 H17 N3 O4



IT **202518-50-1P**
(prepn. of triacryloyltriazine)

L9 ANSWER 9 OF 27 ZCA COPYRIGHT 2004 ACS on STN
127:360062 Polyester films having coatings with good adhesion, antistatic property, and appearance. Okada, Shinichiro; Fukuda, Masayuki (Teijin Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09272749 A2 19971021 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-83943 19960405.

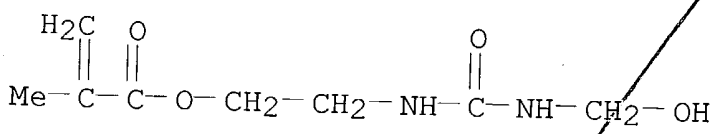
AB Title films, useful for magnetic cards, comprise arom. polyester films coated with compns. contg. 50-95% phosphate ester salt-type polymers and 5-50% urea (deriv.) group-contg. polymers. Thus, a polyester film comprising 90% PET and 10% TiO2 was coated with a primer comprising 80% aq. soln. contg. 5% methacryloyl polyoxyethylene glycol K phosphate-Bu acrylate-Me methacrylate-methacrylic acid copolymer (60/20/15/5) and 20% aq. soln. contg. 5% methacryloyloxyethylmonomethylolurea-Et acrylate-acrylonitrile copolymer (20/50/30) and stretched to give a film showing uniform coating appearance, good adhesion with a magnetic coating and a UV ink, and surface resistivity 6 .times. 109 .OMEGA./.box. (at 23.degree. and 65% RH).

IT **198409-48-2 198409-51-7**
(coating; polyester films having antistatic adhesive coatings contg. phosphate polymers and urea polymers)

RN 198409-48-2 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)amino]carbonyl]amino]ethyl ester, polymer with ethyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

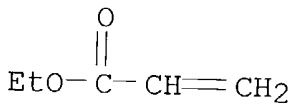
CM 1

CRN 198409-47-1
CMF C8 H14 N2 O4



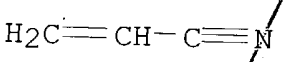
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

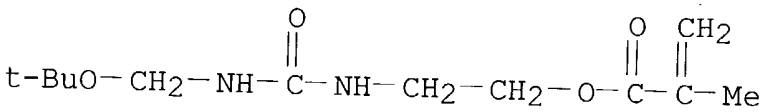
CRN 107-13-1
CMF C3 H3 N



RN 198409-51-7 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1,1-dimethylethoxy)methyl]amino]carbonyl]amino]ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

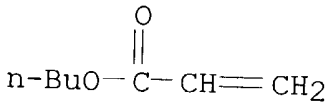
CM 1

CRN 198409-50-6
CMF C12 H22 N2 O4



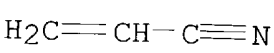
CM 2

CRN 141-32-2
CMF C7 H12 O2



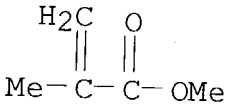
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 80-62-6
CMF C5 H8 O2



IT **198409-48-2 198409-51-7**
(coating; polyester films having antistatic adhesive coatings contg. phosphate polymers and urea polymers)

L9 ANSWER 10 OF 27 ZCA COPYRIGHT 2004 ACS on STN
125:119499 Solid polymer electrolytes, batteries and double layer capacitors thereof, and their manufacture. Takeuchi, Masataka; Tamura, Eri (Showa Denko Kk, Japan). Jpn. Kokai Tokkyo Koho JP 08111220 A2 19960430 Heisei, 21 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-274369 19941013. PRIORITY: JP 1994-218260 19940818.

AB The electrolytes are composites contg. a polymer or copolymer of CH2:CR1CO[O(CH2)x(CHMe)y]zNHCOOR2, where R1 = H or Me; R2 = linear, branched, or cyclic org. chain contg. .gtoreq.1 oxyalkylene group and may contain .gtoreq.1 element other than C, H, and O, x and y =0-5, z =0-10 with z = 0 when both x and y =0, and random arrangement of CH2 and CHMe in [O(CH2)x(CHMe)y]z; CH2:CR1CO[O(CH2)x(CHMe)y]zNHCOO(R3O)nR4, where R3 = -(CH2)- or -CHMeCH2-, R4 = C1-10 alkyl, -CONH[O(CH2)x'(CHMe)y']z'OCOCH:CH2, -CONH[O(CH2)z'(CHMe)y']z', OCOCMe:CH2, -CONHCOCMe:CH2 or -CONHCOCH:CH2, n .gtoreq.1, x' and y' = 0-5, z' = 0-10 with z = 0 when both x' and y' =0 and random arrangement of CH2 and CHMe in [O(CH2)x'(CHMe)y']z'; or CH2:CR1CO[O(CH2)x(CHMe)y]zNHCOO[(R6O)mCONHR

5NHCOO]k(R3O)nR4, where R6 = -(CH2)2- or -CHMeCH2-, R5 = C1-20 alkylene, allylene, or arylene group or oxyalkylene group, and n, m, and k .gtoreq.1. The electrolyte also contain an alkali metal salt, a quaternary ammonium salt, a quaternary phosphonium salt, or a transition metal salt. Batteries using these electrolytes use anodes composed of Li, Li alloy, or Li intercalating carbonaceous, or cathodes composed of polyaniline or other conducting polymer cathodes or metal oxide or sulfide cathodes or a carbonaceous material. The batteries are prepd. by applying a mixt. of the salt and the monomer on a support or a battery member and polymg. the monomer. The capacitors have the polymer electrolyte between electrodes, preferably carbonaceous electrodes.

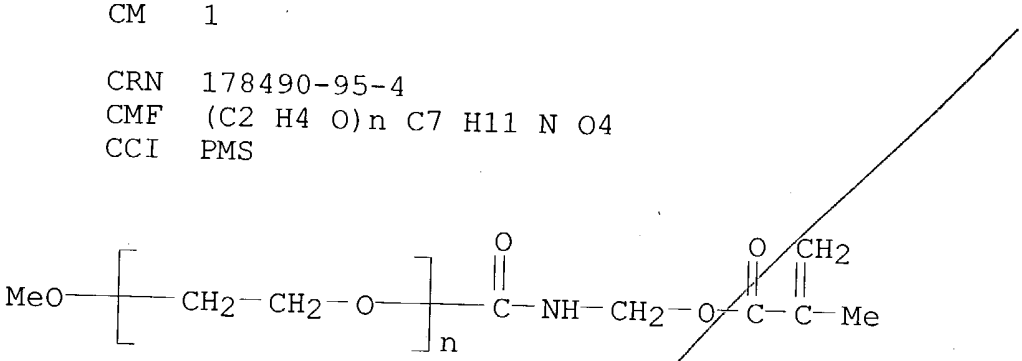
IT **178490-96-5P**
(manuf. of polyoxyalkylene urethane acrylate solid electrolytes for batteries and capacitors)

RN 178490-96-5 ZCA

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[(2-methyl-1-oxo-2-propenyl)amino]carbonyl]-.omega.-[[[(2-methyl-1-oxo-2-propenyl)amino]carbonyl]oxy]-, polymer with .alpha.-[[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]carbonyl]-.omega.-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

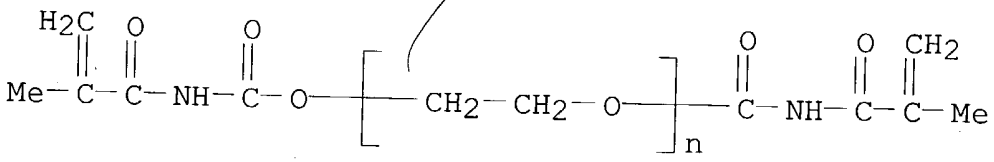
CM 1

CRN 178490-95-4
CMF (C2 H4 O)n C7 H11 N O4
CCI PMS



CM 2

CRN 178490-89-6
CMF (C2 H4 O)n C10 H12 N2 O5
CCI PMS

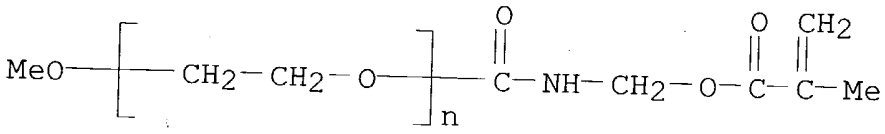


IT **178490-95-4P**

(prepn. of monomers for polyoxyalkylene urethane acrylate solid electrolytes for batteries and capacitors)

RN 178490-95-4 ZCA

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]carbonyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)



IT **178490-96-5P**

(manuf. of polyoxyalkylene urethane acrylate solid electrolytes for batteries and capacitors)

IT **178490-95-4P**

(prepn. of monomers for polyoxyalkylene urethane acrylate solid electrolytes for batteries and capacitors)

L9 ANSWER 11 OF 27 ZCA COPYRIGHT 2004 ACS on STN

120:9961 Phosphor(n)ic acid and/or ester-crosslinked fire-resistant polyolefin foams. Imori, Yoshihisa; Oonuma, Kenichi; Shinko, Yasunori; Zama, Taku (Ajinomoto KK, Japan). Jpn. Kokai Tokkyo Koho JP 05125085 A2 19930521 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-102200 19910207. PRIORITY: JP 1990-124231 19900516.

AB Foams are impregnated with compds. such as N-(dimethylphosphonomethyl)acrylamide (I), N,N-bis(phosphonomethyl)acrylamide, etc., and irradiated with ionizing radiation to prep. the title foams. Thus, an EVA foam (Obcel LC300N3) was impregnated with I and irradiated with electron beam to prep. a fire-resistant foam.

IT **151752-47-5 151752-49-7 151752-50-0 151752-51-1 151752-52-2 151752-53-3 151752-54-4**

(cellular, fire-resistant)

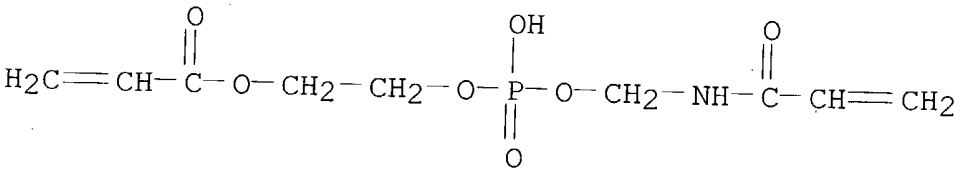
RN 151752-47-5 ZCA

CN 2-Propenoic acid, 4-hydroxy-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with ethene, ethenyl acetate and 2-(phosphonooxy)ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

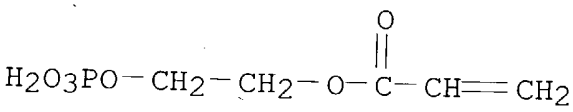
CRN 151752-46-4

CMF C9 H14 N O7 P



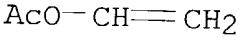
CM 2

CRN 32120-16-4
CMF C5 H9 O6 P



CM 3

CRN 108-05-4
CMF C4 H6 O2



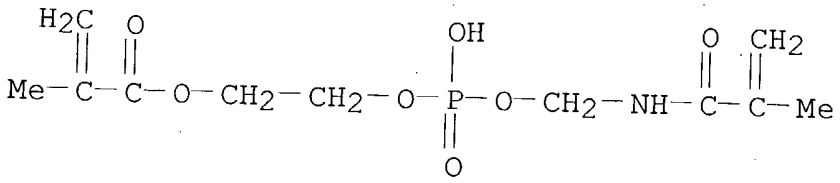
CM 4

CRN 74-85-1
CMF C2 H4

RN 151752-49-7 ZCA
CN 2-Propenoic acid, 2-methyl-, 4-hydroxy-9-methyl-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with ethene, ethenyl acetate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

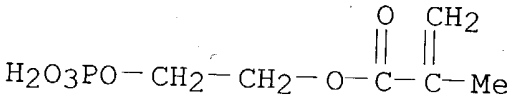
CM 1

CRN 151752-48-6
CMF C11 H18 N O7 P



CM 2

CRN 24599-21-1
CMF C6 H11 O6 P

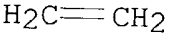


CM 3

CRN 108-05-4
CMF C4 H6 O2

CM 4

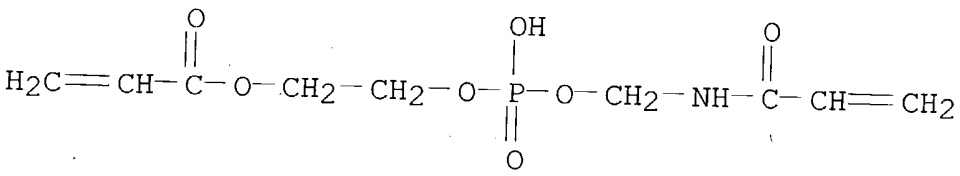
CRN 74-85-1
CMF C2 H4



RN 151752-50-0 ZCA
CN 2-Propenoic acid, 1,6-hexanediylbis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with ethene, ethenyl acetate, 4-hydroxy-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl 2-propenoate and 2(phosphonooxy)ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

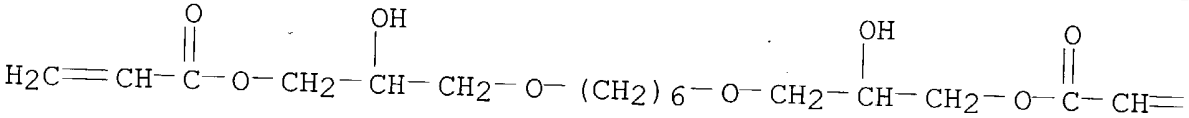
CRN 151752-46-4
CMF C9 H14 N O7 P



CM 2

CRN 83045-03-8
CMF C18 H30 O8

PAGE 1-A

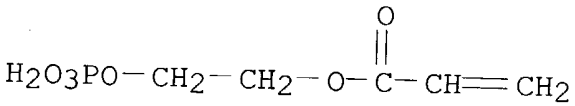


PAGE 1-B

$=CH_2$

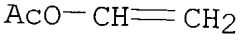
CM 3

CRN 32120-16-4
CMF C5 H9 O6 P



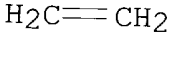
CM 4

CRN 108-05-4
CMF C4 H6 O2



CM 5

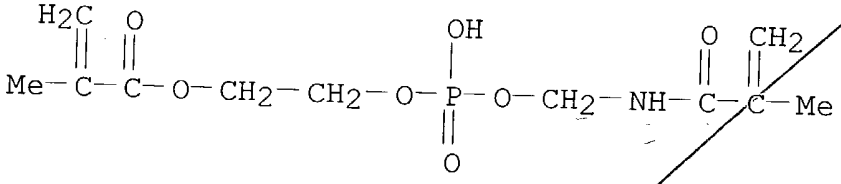
CRN 74-85-1
CMF C2 H4



RN 151752-51-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 4-hydroxy-9-methyl-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with ethene, ethenyl acetate, 1,6-hexanediylbis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

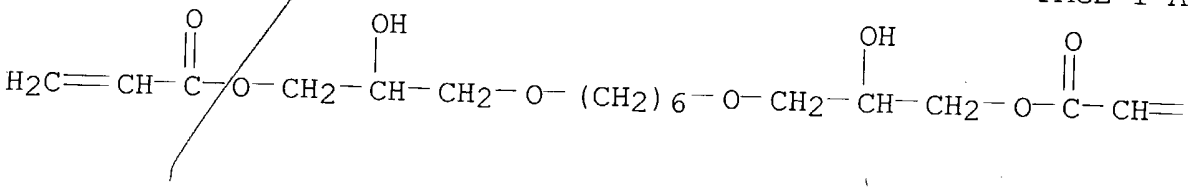
CM 1

CRN 151752-48-6
CMF C11 H18 N O7 P



CM 2

CRN 83045-03-8
CMF C18 H30 O8



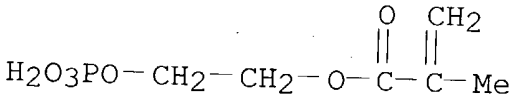
PAGE 1-A

PAGE 1-B

$=CH_2$

CM 3

CRN 24599-21-1
CMF C6 H11 O6 P



CM 4

CRN 108-05-4
CMF C4 H6 O2

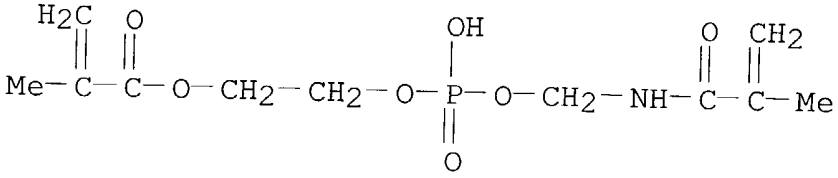
CM 5

CRN 74-85-1
CMF C2 H4

RN 151752-52-2 ZCA
CN 2-Propenoic acid, 2-methyl-, 4-hydroxy-9-methyl-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, ethene, ethenyl acetate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

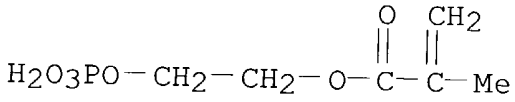
CM 1

CRN 151752-48-6
CMF C11 H18 N O7 P



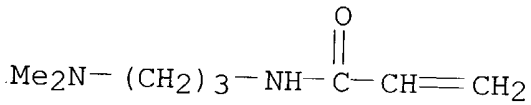
CM 2

CRN 24599-21-1
CMF C6 H11 O6 P



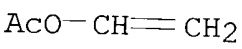
CM 3

CRN 3845-76-9
CMF C8 H16 N2 O



CM 4

CRN 108-05-4
CMF C4 H6 O2



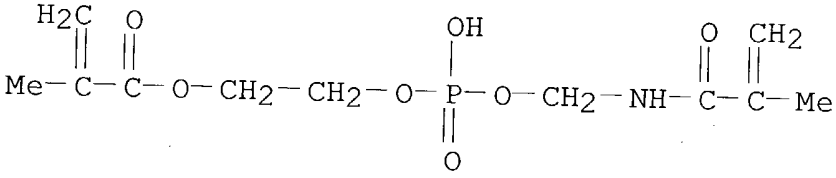
CM 5

CRN 74-85-1
CMF C2 H4

RN 151752-53-3 ZCA
CN 2-Propenoic acid, 2-methyl-, 4-hydroxy-9-methyl-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with ethene, ethenyl acetate, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) di-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

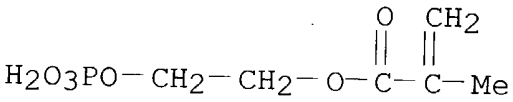
CM 1

CRN 151752-48-6
CMF C11 H18 N O7 P



CM 2

CRN 24599-21-1
CMF C6 H11 O6 P



CM 3

CRN 17831-71-9
CMF C14 H22 O7

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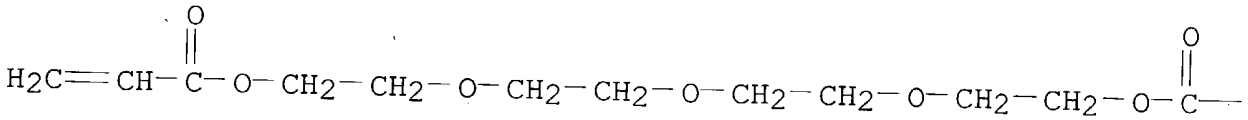
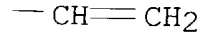
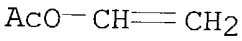


PAGE 1-B



CM 4

CRN 108-05-4
CMF C4 H6 O2



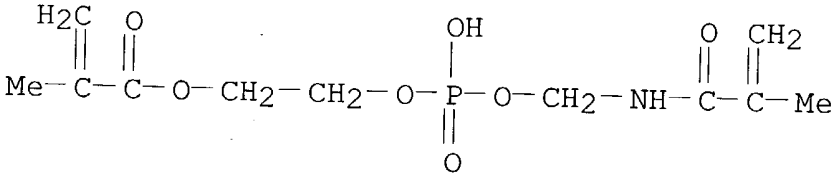
CM 5

CRN 74-85-1
CMF C2 H4

RN 151752-54-4 ZCA
CN 2-Propenoic acid, 2-methyl-, 4-hydroxy-9-methyl-4-oxido-8-oxo-3,5-dioxa-7-aza-4-phosphadec-9-en-1-yl ester, polymer with ethene, ethenyl acetate, 1,6-hexanediyl di-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

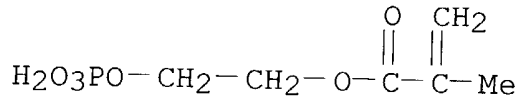
CRN 151752-48-6
CMF C11 H18 N O7 P



CM 2

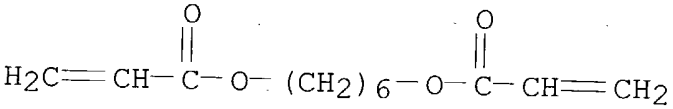
CRN 24599-21-1

CMF C6 H11 O6 P



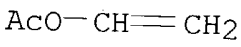
CM 3

CRN 13048-33-4
CMF C12 H18 O4



CM 4

CRN 108-05-4
CMF C4 H6 O2



CM 5

CRN 74-85-1
CMF C2 H4

IT **151752-47-5 151752-49-7 151752-50-0 151752-51-1 151752-52-2 151752-53-3 151752-54-4**
(cellular, fire-resistant)

L9 ANSWER 12 OF 27 ZCA COPYRIGHT 2004 ACS on STN
117:152861 Surface modifiers for radiation-curable polymer materials. Oshibe, Yoshihiro; Yamada, Tsunehisa; Yamamoto, Hisao; Omura, Hiroshi (Nippon Yushi K. K., Japan). Jpn. Kokai Tokkyo Koho JP 04065409 A2 19920302 Heisei, 19 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-179190 19900705.
AB Fluoropolymers imparting oil repellency, water repellents, soiling

resistance, etc. are prepd. by polymg. glycidyl (meth)acrylates with vinyl monomers in the presence of polymeric peroxide initiators in the first stage, polymg. with fluoromonomers in the second stage, and treating with (meth)acrylic acid. Thus, Me methacrylate 80, glycidyl methacrylate 120, and [CO(CH2)4CO2(C2H4O)2CO(CH2)4CO2O]10 18 g were polymd. in MEK at 70.degree., block copolymd. (28 g powder) with 12 g perfluorooctylethyl acrylate in MEK at 70.degree., treated (5 g powder) with 0.96 g methacrylic acid, and used as a surface modifier for a UV-cured coating on a polycarbonate.

IT **142620-85-7**

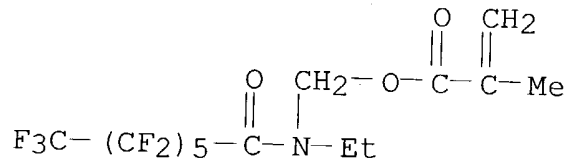
(surface modifiers, for coatings)

RN 142620-85-7 ZCA

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl)amino]methyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

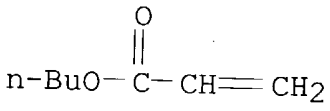
CM 1

CRN 142620-84-6
CMF C14 H12 F13 N O3



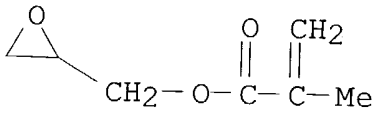
CM 2

CRN 141-32-2
CMF C7 H12 O2



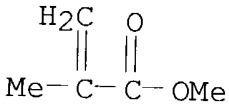
CM 3

CRN 106-91-2
CMF C7 H10 O3



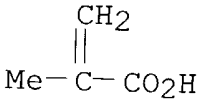
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

CRN 79-41-4
CMF C4 H6 O2



IT **142620-85-7**
(surface modifiers, for coatings)

L9 ANSWER 13 OF 27 ZCA COPYRIGHT 2004 ACS on STN
117:131741 Actinic energy beam-curable surface modifiers for polymers. Oshibe, Yoshihiro; Yamada, Tsunehisa; Yamamoto, Hisao; Omura, Hiroshi (Nippon Oil and Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04039317 A2 19920210 Heisei, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-145184 19900601.

AB Block copolymer surface modifiers with good surface orientation properties comprise (A)10-80% vinyl esters CH2:CR1CO2R2R and (B) 20-90% 30-99:1-70 mixt. of vinyl compds. CH2:CR3R4 and vinyl esters CH2:CR5CO2(R6)tC(O)R7 [R1, R5 = H, Me; R2 = (CH2)1-10, CH2CH2O, C[(CH2)1-10H]H, CH2C[(CH2)1-10H]H; R = CnF2n+1, (CF2)nH, etc.; n = 1-16; R3 = H, Me, CH2CO2H; R4 = COOR8; R8 = H, benzyl, cyclohexyl, etc., R6 = C2H4O, CH2CHMeO; R7 = CH2:CH, CH2:CMe, CH2:CHCO2C2H4O; CH2:CMeCO2C2H4O; t = 1-20]. Polymg. a mixt. of MEK 135, Me methacrylate 120, hydroxyethyl methacrylate 80, and [CO(CH2)CO2(C2H4O)2CO(CH2)4C(O)O2]10 12 parts at 70.degree. for 4.5 h, block polymg. the resulting peroxy-contg. powd. polymer with

F3C(CF2)7CH2CH2O2CCH:CH2 in MEK at 70.degree. for 10 h, and treating the block copolymer 5, MEK 15, pyridine 2.37, and acryloyl chloride 0.637 part at 50.degree. for 2 h gave a block copolymer with A/B 32:68. Dilg. the block copolymer to 30% with MEK, mixing 100 parts coating soln. of epoxy acrylate (SP 1506) 80, urethane acrylate (M 1100) 60, and MEK 350 parts with 1 part the block copolymer, applying to an Al plate, and irradiating with a UV lamp gave a coat with water contact angle 110.degree. and 108.degree.; and dodecane contact angle 70 and 68.degree., before and after soaking in Me2CO, resp.

IT **143350-65-6**

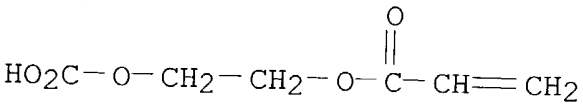
(surface modifiers, radiation-curable, for polymers)

RN 143350-65-6 ZCA

CN 2-Propenoic acid, 2-methyl-, [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl)amino]methyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, 2-[(1-oxo-2-propenyl)oxy]ethyl carbonate, block (9CI) (CA INDEX NAME)

CM 1

CRN 193562-24-2
CMF C6 H8 O5

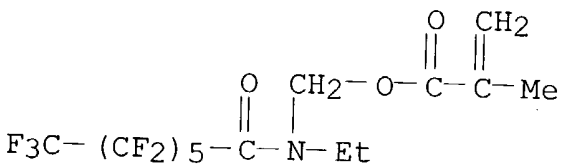


CM 2

CRN 212829-70-4
CMF (C14 H12 F13 N O3 . C7 H12 O2 . C5 H8 O3 . C5 H8 O2)x
CCI PMS

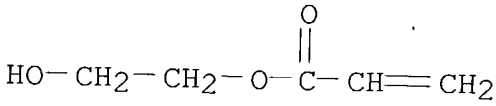
CM 3

CRN 142620-84-6
CMF C14 H12 F13 N O3



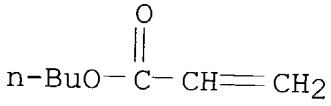
CM 4

CRN 818-61-1
CMF C5 H8 O3



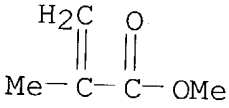
CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



IT **143350-65-6**
(surface modifiers, radiation-curable, for polymers)

L9 ANSWER 14 OF 27 ZCA COPYRIGHT 2004 ACS on STN
116:215128 Unsaturated fluorine-containing block copolymers, their manufacture and use as surface modifiers for radiation-curable resins. Oshibe, Yoshihiro; Yamada, Michihisa; Yamamoto, Hisao; Ohmura, Hiroshi (Nippon Oil and Fats Co., Ltd., Japan). Eur. Pat. Appl. EP 457610 A2 19911121, 30 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1991-304461 19910517. PRIORITY: JP 1990-128258 19900517.

AB The title block copolymers, with good water and oil repellent and good curability by radiation, are prepd. by contacting a block copolymer of CH2:CR1CO2R2Rf and CH2:CR3R4 and a compd. CH:CR5CO2(R6)tH with R7COCl to effect a dehydrochlorination (R1 = H,

Me; R2 = divalent hydrocarbyl; Rf = fluoro hydrocarbyl; R3 = H, Me, CH2CO2H; R4 = CO2R; R = H, org group; R5 = H Me; R6 = C2H4O, CH2CH(Me)O; R7 = PhCH:CH, CH2:CH, etc.). Me methacrylate 120, hydroxymethyl methylacrylate 80, and [CO(CH2)4CO2(C2H4O)3CO(CH2)4CO3]10 15 parts were polymd. in MEK to give a peroxy-contg. polymer, which (28 parts) was block copolymd. with 12 parts CF3(CF2)7(CH2)3OCOCH:CH2 and terminated with acryloyl chloride. A PVC substrate was coated with the acrylic-terminated block polymer and UV cured with Darocure 1173 resulting in a coat with water contact angle 116.degree. and good adhesion.

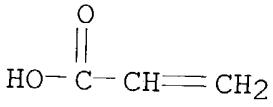
IT **141348-37-0 141348-38-1**
(photocurable, as surface modifiers, for radiation-curable resins)

RN 141348-37-0 ZCA

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl)amino]methyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

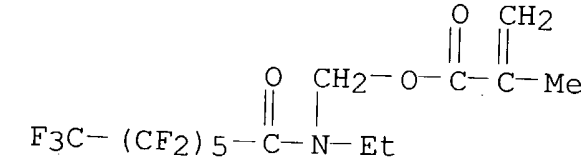


CM 2

CRN 193562-22-0
CMF (C14 H12 F13 N O3 . C8 H14 O2 . C6 H10 O3 . C5 H8 O2)x
CCI PMS

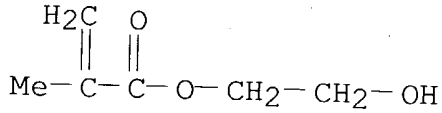
CM 3

CRN 142620-84-6
CMF C14 H12 F13 N O3



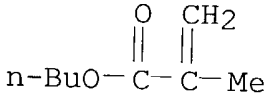
CM 4

CRN 868-77-9
CMF C6 H10 O3



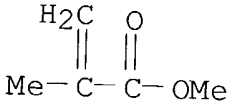
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

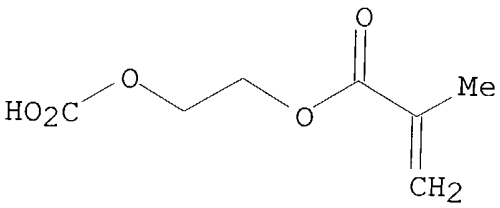
CRN 80-62-6
CMF C5 H8 O2



RN 141348-38-1 ZCA
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl)amino]methyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl carbonate, block (9CI) (CA INDEX NAME)

CM 1

CRN 188477-76-1
CMF C7 H10 O5

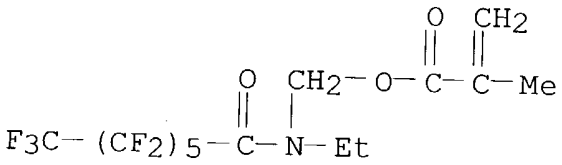


CM 2

CRN 193562-22-0
CMF (C14 H12 F13 N O3 . C8 H14 O2 . C6 H10 O3 . C5 H8 O2)x
CCI PMS

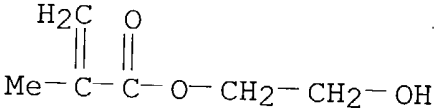
CM 3

CRN 142620-84-6
CMF C14 H12 F13 N O3



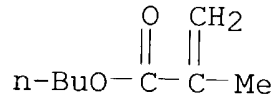
CM 4

CRN 868-77-9
CMF C6 H10 O3



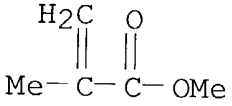
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



IT **141348-37-0 141348-38-1**
(photocurable, as surface modifiers, for radiation-curable resins)

L9 ANSWER 15 OF 27 ZCA COPYRIGHT 2004 ACS on STN
116:153501 Modified polyester primers and coated polyester films with improved ink reception and antiblocking properties. Minobe, Kazuyuki; Ichihashi, Tetsuo; Miura, Sadami; Fukuda, Masayuki (Teijin Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 03273015 A2 19911204 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-71400 19900320.

AB Title modified polyesters are obtained by polymg. 19-90% hydrophilic monomers in the presence of 10-90% sulfonate group-free polyesters in soln. or dispersion and an aq. soln. or dispersion contg. 0.5-30% title polyesters and 70-99.5% H2O is applied to one or both sides of polyester films. Thus, Me methacrylate 50, Et acrylate 45, and methacrylamide 5 parts were polymd. in an aq. medium contg. 100 parts bisphenol A-ethylene oxide (1:4) adduct-1,4-butanediol-isophthalic acid-terephthalic acid copolymer, and the reaction mixt. was dild. with H2O to 3% concn., applied to a unidirectionally stretched PET film, then stretched in transverse direction, and heat-set to give a 50 .mu.m-thick film with a 0.1 .mu.m-thick primer coat. The film showed good ink reception and antiblocking property while a control prepd. in the presence of sodiosulfoisopthalic acid-contg. polyester showed good ink reception but poor antiblocking property.

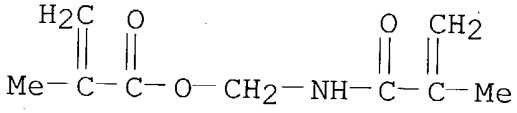
IT **139749-71-6**
(prepn.of, for use in primers contg. acrylic polymers, on biaxially oriented polyester films, for improved ink reception and antiblocking property)

RN 139749-71-6 ZCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethyl 2-propenoate, [(2-methyl-1-oxo-2-propenyl)amino]methyl 2-methyl-2-propenoate and sodium 2-propenoate (9CI) (CA INDEX NAME)

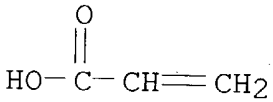
CM 1

CRN 139749-70-5
CMF C9 H13 N O3



CM 2

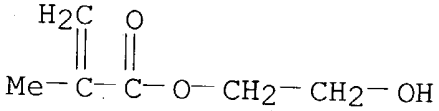
CRN 7446-81-3
CMF C3 H4 O2 . Na



● Na

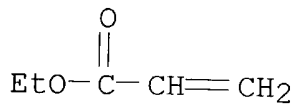
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 140-88-5
CMF C5 H8 O2



IT **139749-71-6**
(prepn.of, for use in primers contg. acrylic polymers, on biaxially oriented polyester films, for improved ink reception and antiblocking property)

L9 ANSWER 16 OF 27 ZCA COPYRIGHT 2004 ACS on STN
112:37643 Thermosetting resin compositions and their uses as laminates for printed circuit boards. Doi, Takao; Kitamura, Tateo; Yamada, Yutaka (Asahi Glass Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01131270 A2 19890524 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1987-288447 19871117.

AB Substrates are impregnated with title compns. contg. thermosetting resins (A), fluoro resin sols (B), and polymers prepd. from mixts. contg. polyfluoroalkyl- or C.gtoreq.4 hydrocarbyl-contg. acrylate and/or methacrylate esters in the presence of A and/or B, dried, laminated, and the resulting composites cladded with metal foils to give title laminates. Thus, 90 parts Epikote 1001 and 2 parts isocyanatoethyl methacrylate were treated at 80.degree. for 5 h, mixed with CF3(CF2)7SO2NEt(CH2)2OCOCMe:CH2 10, AIBN 1 and MIBK 50 parts for 1 h, and stirred with 1000 parts 40% MEK org. sol of tetrafluoroethylene-hexafluoropropylene copolymer, 3.6 parts dicyandiamide, and 0.2 part benzyldimethylamine to give a varnish (C). Then, 4 glass cloths were impregnated with the varnish and dried to give prepregs, which were laminated, sandwiched with Cu foils and press molded to give a Cu-clad laminate showing dielec. const. 3.1, dielec. loss 0.008, peeling strength of the foil at room temp. 1.9 kg/cm, and 1.9 kg/cm after 2-h boiling, vs. 4.2, 0.0020, 1.2, and 1.0, resp., for the laminate using bismaleimide-triazine resin instead of C.

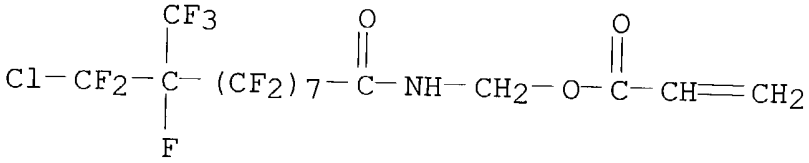
IT **124374-97-6**
(varnish, contg. fluoropolymer sol, for printed circuit laminate)

RN 124374-97-6 ZCA
CN 2-Propenoic acid, [[9-(chlorodifluoromethyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-octadecafluoro-1-oxodecyl]amino]methyl ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 124374-96-5

CMF C15 H6 Cl F20 N O3

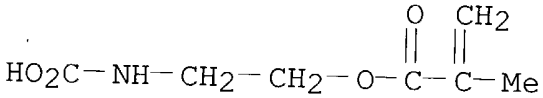


CM 2

CRN 120797-49-1
CMF (C15 H16 O2 . C3 H5 Cl O)x . x C7 H11 N O4

CM 3

CRN 96571-20-9
CMF C7 H11 N O4

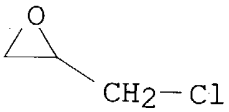


CM 4

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

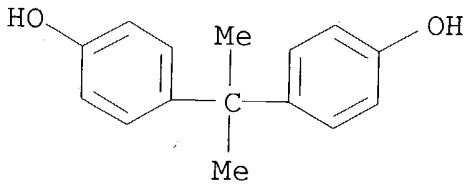
CM 5

CRN 106-89-8
CMF C3 H5 Cl O



CM 6

CRN 80-05-7
CMF C15 H16 O2



IT **124374-97-6**
(varnish, contg. fluoropolymer sol, for printed circuit laminate)

L9 ANSWER 17 OF 27 ZCA COPYRIGHT 2004 ACS on STN
109:151604 Amine-containing photocurable coatings for optical fibers. Kanda, Kazunori; Ishii, Keizo; Ishikura, Shinichi (Nippon Paint Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 63051402 A2 19880304 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-195906 19860820.

AB The title compns. contain photoinitiators and 0.1-40 parts crosslinked vinyl polymer particles contg. amines (diam. 0.01-6 .mu.m). A mixt. of polytetramethylene glycol-isophorone diisocyanate-Placcel FA1 (caprolactone-modified acrylate) copolymer 70, NK Ester AMP60G (acrylic monomer) 30, Ph2CO 2, and fine particles [prepd. from (bishydroxyethyl)taurine-neopentyl glycol-azelaic acid-phthalic anhydride-Cardura E10 copolymer, Me methacrylate, Bu acrylate, styrene, 2-hydroxyethyl acrylate, (dimethylamino)propyl methacrylate and ethylene dimethacrylate) 5 parts was coated on a quartz glass plate and cured with UV to give a film with Young's modulus 0.32 kg/mm2 and elongation 70% at 20.degree., and 0.35 and 150, resp. at -40.degree.; vs. 35, 40, 0.40, and 70, resp., with Et3N instead of fine particles.

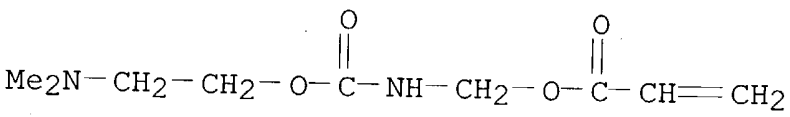
IT **116819-89-7**
(coatings, photocurable, for optical fibers)

RN 116819-89-7 ZCA

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, [[[2-(dimethylamino)ethoxy]carbonyl]amino]methyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

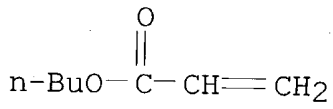
CM 1

CRN 116819-88-6
CMF C9 H16 N2 O4



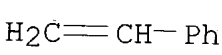
CM 2

CRN 141-32-2
CMF C7 H12 O2



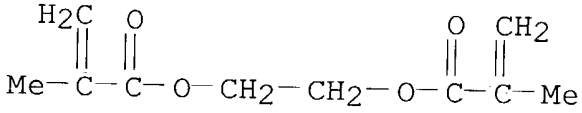
CM 3

CRN 100-42-5
CMF C8 H8



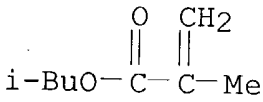
CM 4

CRN 97-90-5
CMF C10 H14 O4



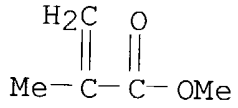
CM 5

CRN 97-86-9
CMF C8 H14 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



IT **116819-89-7**
(coatings, photocurable, for optical fibers)

L9 ANSWER 18 OF 27 ZCA COPYRIGHT 2004 ACS on STN
104:130462 Modifying the surface of polymers. Oshibe, Yoshihiro; Ohmura, Hiroshi; Nakayama, Masaharu; Yamamoto, Takashi (Nippon Oils & Fats Co., Ltd., Japan). Eur. Pat. Appl. EP 161804 A1 19851121, 105 pp. DESIGNATED STATES: R: DE, FR, GB, IT, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1985-302564 19850412. PRIORITY: JP 1984-79102 19840419.

AB Block fluoropolymers prepd. with polymeric peroxide or azo compd. initiators are useful for surface modification of blends with compatible polymers. Thus, a block copolymer was prepd. by polymg. 120 parts Bu methacrylate and 120 parts Me methacrylate using [CO(CH2)4CO2(C2H4O)3CO(CH2)4C(O)OO]10 initiator at 70.degree. and then with CH2:CHCO2CH2CH2C8F17 at 70.degree. for 6 h. The copolymer was mixed (1.5%) with 50:50 Bu methacrylate-Me methacrylate copolymer and coated on steel, giving water and dodecane contact angle 115.degree. and 74.degree..

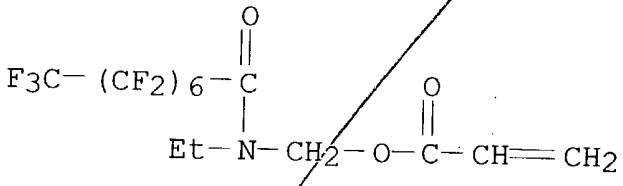
IT **101052-08-8 101158-20-7**
(block, blends, for surface modification of polymers)

RN 101052-08-8 ZCA

CN Hexanedioic acid, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]methyl 2-propenoate and (1,1,4,4-tetramethyl-1,4-butanediyl)bis[hydroperoxide] (9CI) (CA INDEX NAME)

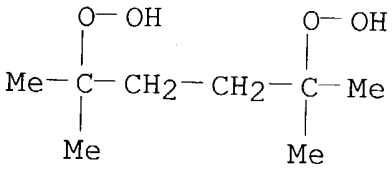
CM 1

CRN 101052-07-7
CMF C14 H10 F15 N O3



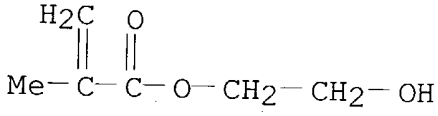
CM 2

CRN 3025-88-5
CMF C8 H18 O4



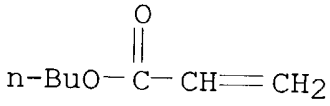
CM 3

CRN 868-77-9
CMF C6 H10 O3



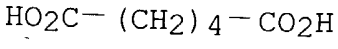
CM 4

CRN 141-32-2
CMF C7 H12 O2



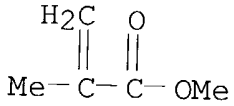
CM 5

CRN 124-04-9
CMF C6 H10 O4



CM 6

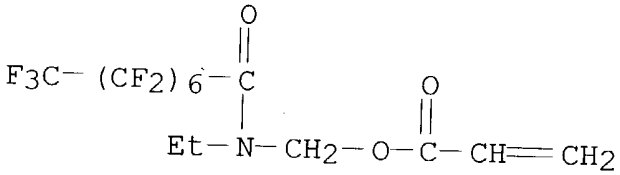
CRN 80-62-6
CMF C5 H8 O2



RN 101158-20-7 ZCA
CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate, 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptyl 2-propenoate, 2-ethylhexyl 2-methyl-2-propenoate, [ethyl(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]methyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-propenoic acid and (1,1,4,4-tetramethyl-1,4-butanediyl)bis[hydroperoxide] (9CI) (CA INDEX NAME)

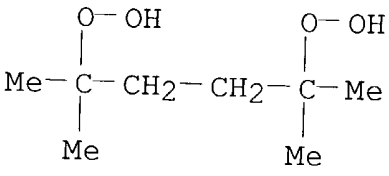
CM 1

CRN 101052-07-7
CMF C14 H10 F15 N O3



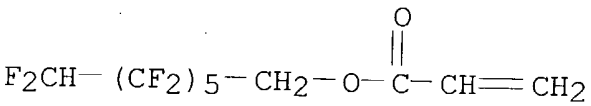
CM 2

CRN 3025-88-5
CMF C8 H18 O4



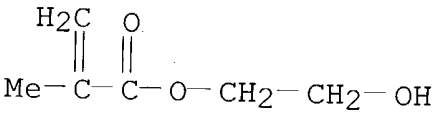
CM 3

CRN 2993-85-3
CMF C10 H6 F12 O2



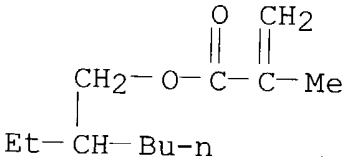
CM 4

CRN 868-77-9
CMF C6 H10 O3



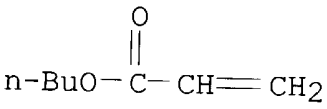
CM 5

CRN 688-84-6
CMF C12 H22 O2



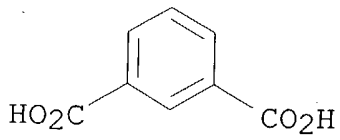
CM 6

CRN 141-32-2
CMF C7 H12 O2



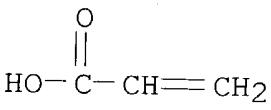
CM 7

CRN 121-91-5
CMF C8 H6 O4



CM 8

CRN 79-10-7
CMF C3 H4 O2

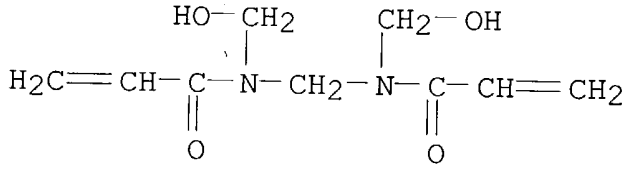


IT **101052-08-8 101158-20-7**
(block, blends, for surface modification of polymers)

L9 ANSWER 19 OF 27 ZCA COPYRIGHT 2004 ACS on STN
102:167699 Crosslinked copolymer and its use as an absorbent. Keil, Karl Heinz; Engelhardt, Fritz; Greiner, Ulrich; Kuehlein, Klaus; Keller, Reinhold; Schlingmann, Merten; Hess, Gerhard (Cassella A.-G., Fed. Rep. Ger.). Ger. Offen. DE 3324835 A1 19850117, 26 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1983-3324835 19830709.
AB Crosslinked copolymers prepd. from a heterocyclic compd. contg. 5 ring atoms, >1 of which is N, and a polymerizable olefinic group and .gtoreq.1 crosslinking monomer are useful as adsorbents for the sepn. of acid from solns. Thus, 40 g 1-vinylimidazole, 2.5 g (H2C:CHCONH)2CH2, and 2.5 g [H2C:CHCO2(CH2)3SiMe2OSiMe2]2O was dissolved in 45 mL water contg. 4,4'-azobis(cyanopentanoic acid). The soln. was added to 300 mL heptane contg. 1 g lipophilic protective colloid and stirred 1 h at 70.degree. to give 42 g copolymer [95991-29-0] beads which adsorbed 75 g lactic acids/g beads when water contg. 1% lactic acid was passed over the beads. The lactic acid was eluted with MeOH or acetone.
IT **96019-12-4P**
(prepn. of, as adsorbent for acids)
RN 96019-12-4 ZCA
CN 2-Propenamide, N,N'-methylenebis[N-(hydroxymethyl)-, polymer with 4-ethenylthiazole (9CI) (CA INDEX NAME)

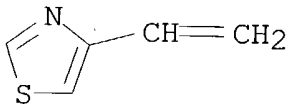
CM 1

CRN 28711-05-9
CMF C9 H14 N2 O4



CM 2

CRN 13816-03-0
CMF C5 H5 N S



IT **96019-12-4P**
(prepn. of, as adsorbent for acids)

L9 ANSWER 20 OF 27 ZCA COPYRIGHT 2004 ACS on STN
96:69898 Hydrophilic copolymers based on N-[tris(hydroxymethyl)methyl]acrylamide, aqueous gels of these copolymers, and their use as ion exchangers. Boschetti, Egisto (Pharmindustrie, Fr.). Eur. Pat. Appl. EP 40124 A1 19811118, 15 pp. DESIGNATED STATES: R: BE, CH, DE, FR, GB, IT, LU, NL, SE. (French). CODEN: EPXXDW. APPLICATION: EP 1981-400659 19810428. PRIORITY: FR 1980-10382 19800509.

AB H2C:CHCONHC(CH2OH)3 (I) and (H2C:CHCONH)2CH2 (II) are copolymd. with H2C:CMeCONH(CH2)3N+Me3 Cl- or H2C:CHCONHCH2CH2N+HEt2 Cl- (III) to give water-insol., crosslinked ion exchangers which are esp. useful for the sepn. of proteins (esp. serum proteins), polynucleotides, and synthetic nucleotides. Thus, I 60, II 8, and III 12 g were copolymd. in an aq. emulsion with a redox catalyst. The copolymer [80730-41-2] was used to sep. a mixt. of cytochrome c, Hb, .beta.-lactoglobulin, and ovalbumin.

IT **80730-40-1**
(anion exchangers, prepn. of crosslinked)

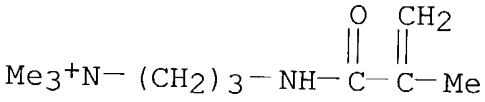
RN 80730-40-1 ZCA

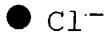
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-propenamide and N,N'-methylenebis[N-(hydroxymethyl)-2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

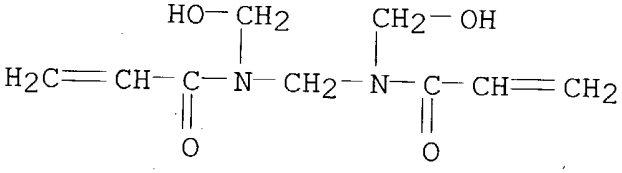
CMF C10 H21 N2 O . Cl





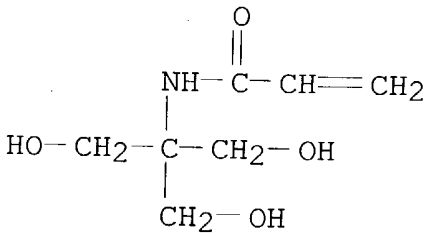
CM 2

CRN 28711-05-9
CMF C9 H14 N2 O4



CM 3

CRN 13880-05-2
CMF C7 H13 N O4



IT **80730-40-1**
(anion exchangers, prepn. of crosslinked)

L9 ANSWER 21 OF 27 ZCA COPYRIGHT 2004 ACS on STN
93:133769 Crosslinkable polymers. Wolf, Gerhard Dieter; Schnoor, Werner; David, Karl Heinz; Reinehr, Ulrich; Nischk, Guenther (Bayer A.-G., Fed. Rep. Ger.). Brit. GB 1564453 19800410, 10 pp. (English). CODEN: BRXXAA. APPLICATION: GB 1977-20444 19770516.

AB Crosslinkable CH2:CHCN polymers contg. .gtoreq.1 N-methylol compd. of an unsatd. urethane as crosslinking agent, useful for fibers and films, are manufd. without crosslinking during polymn. by using .gtoreq.65% CH2:CHCN, optionally .gtoreq.1 comonomer, and 0.5-10% N-methylol deriv. of an unsatd. mono- or dicarboxylic acid contg. 1 or 2 urethane groups. Thus, CH2:CHCN 498.4, 2-(N-methyl-N-hydroxymethylaminocarboxy)propyl methacrylate 56, and Na methallyl sulfonate dye receptor 5.6% were dissolved in 7440 parts H2O at 50.degree. under N. The pH was adjusted to 3.3 with 20% H2SO4 and polymn. was initiated by addn. of 5 parts K2S2O8 and 20 parts Na2S2O5. After 6 h the polymer [**65504-04-3**] was filtered off, washed with H2O, and dried in vacuo at 50-60.degree. (92% yield). A 27% soln. of the polymer in DMF was spun into a bath of H2O and DMF and the coagulated filament was drawn through a bath contg. 0.5% H2SO4 at 50.degree., washed, and dried to give a filament which was insol. in DMF.

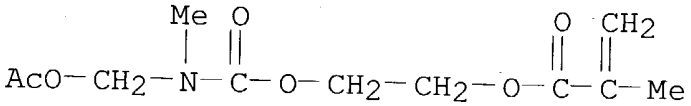
IT **65503-67-5P 65503-69-7P 65503-71-1P**
65503-92-6P 65503-94-8P 65503-96-0P
65504-00-9P 65504-02-1P 65504-04-3P
74951-62-5P
(manuf. of crosslinkable, for fibers and films)

RN 65503-67-5 ZCA

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(acetyloxy)methyl]methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

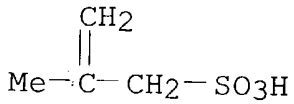
CM 1

CRN 65503-66-4
CMF C11 H17 N O6



CM 2

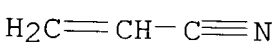
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

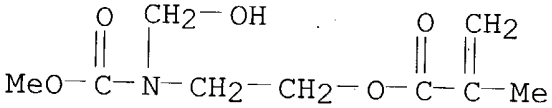
CRN 107-13-1
CMF C3 H3 N



RN 65503-69-7 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[(hydroxymethyl)(methoxycarbonyl)amino]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

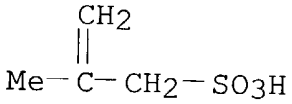
CM 1

CRN 65503-68-6
CMF C9 H15 N O5



CM 2

CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

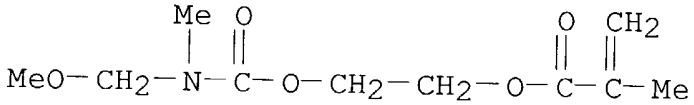
CM 3

CRN 107-13-1
CMF C3 H3 N

RN 65503-71-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(methoxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

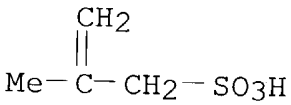
CM 1

CRN 65503-70-0
CMF C10 H17 N O5



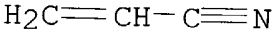
CM 2

CRN 1561-92-8
CMF C4 H8 O3 S . Na



CM 3

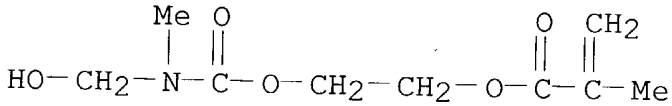
CRN 107-13-1
CMF C3 H3 N



RN 65503-92-6 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

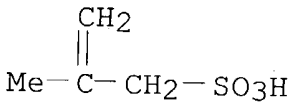
CM 1

CRN 65503-91-5
CMF C9 H15 N O5



CM 2

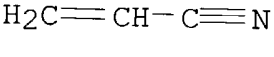
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

CRN 107-13-1
CMF C3 H3 N

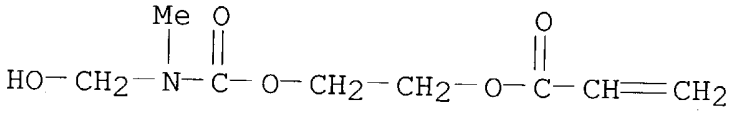


RN 65503-94-8 ZCA
CN 2-Propenoic acid, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

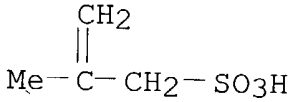
CRN 65503-93-7

CMF C8 H13 N O5



CM 2

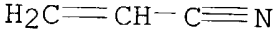
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

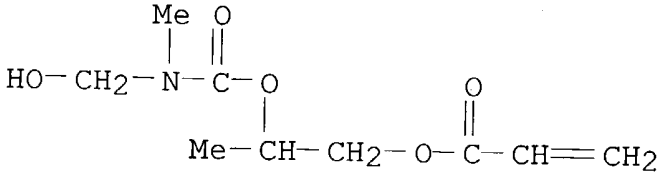
CRN 107-13-1
CMF C3 H3 N



RN 65503-96-0 ZCA
CN 2-Propenoic acid, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenamide, 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

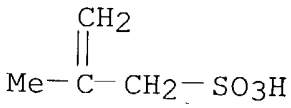
CM 1

CRN 65503-95-9
CMF C9 H15 N O5



CM 2

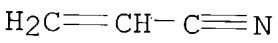
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

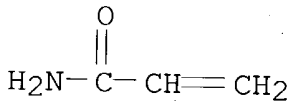
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

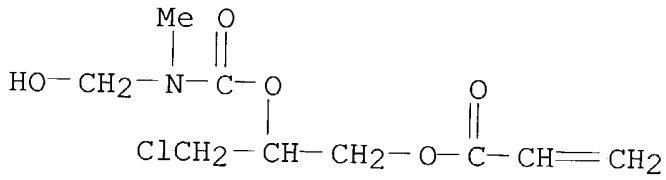
CRN 79-06-1
CMF C3 H5 N O



RN 65504-00-9 ZCA
CN 2-Propenoic acid, 3-chloro-2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

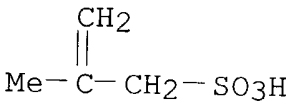
CM 1

CRN 65503-99-3
CMF C9 H14 Cl N O5



CM 2

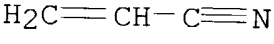
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

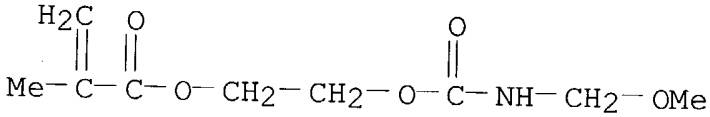
CRN 107-13-1
CMF C3 H3 N



RN 65504-02-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(methoxymethyl)amino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

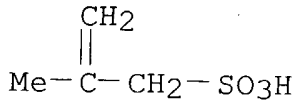
CM 1

CRN 65504-01-0
CMF C9 H15 N O5



CM 2

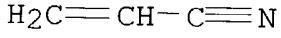
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

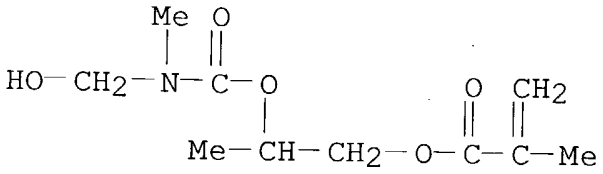
CRN 107-13-1
CMF C3 H3 N



RN 65504-04-3 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

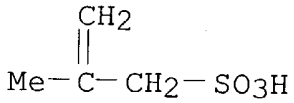
CM 1

CRN 65504-03-2
CMF C10 H17 N O5



CM 2

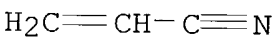
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

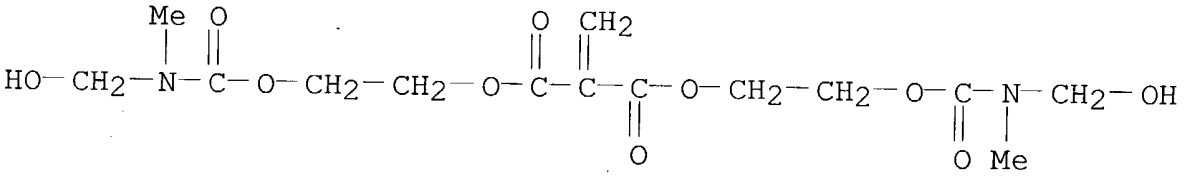
CRN 107-13-1
CMF C3 H3 N



RN 74951-62-5 ZCA
CN Propanedioic acid, methylene-, bis[2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl] ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

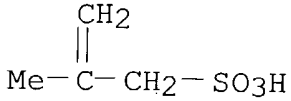
CM 1

CRN 74951-61-4
CMF C14 H22 N2 O10



CM 2

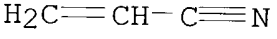
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

CRN 107-13-1
CMF C3 H3 N



IT **65503-67-5P 65503-69-7P 65503-71-1P 65503-92-6P 65503-94-8P 65503-96-0P 65504-00-9P 65504-02-1P 65504-04-3P 74951-62-5P**
(manuf. of crosslinkable, for fibers and films)

L9 ANSWER 22 OF 27 ZCA COPYRIGHT 2004 ACS on STN
88:192617 Crosslinkable modacrylic polymers. Wolf, Gerhard Dieter; Schnoor, Werner; Bentz, Francis (Bayer A.-G., Fed. Rep. Ger.). Ger. Offen. DE 2632733 19780126, 23 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1976-2632733 19760721.

AB Crosslinked, fire-resistant acrylic polymers and fibers are prepd. from acrylonitrile (I) 18-74.5, a haloolefin [i.e., CH2:CCl2 (II)] 25-60, unsatd. N-methylolurethane deriv. 0.5-12, and quatermonomer 0-10 wt.%. Thus, to a mixt. (adjusted to pH 3.5 with dil. H2SO4) of 7000 vol. parts water contg. I 512, II 256, allyl (hydroxymethyl)methylcarbamate 24, and Na methallylsulfonate 8 wt. parts at 30.degree. were added 6 wt. parts K2S2O8 and 22.5 wt. parts Na disulfite, followed by further addns. after two 9-min intervals. After 22 h, 718 wt. parts polymer [66148-91-2] of K value 90 was obtained. Fibers were spun from DMF, treated with 1% HCl at 50.degree., washed, and dried at 150.degree. to provide DMF-insol. filaments.

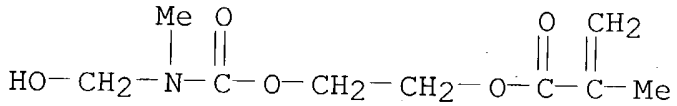
IT **66138-88-3**
(fiber, crosslinked fire-resistant)

RN 66138-88-3 ZCA

CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 1,1-dichloroethene, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

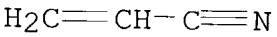
CM 1

CRN 65503-91-5
CMF C9 H15 N O5



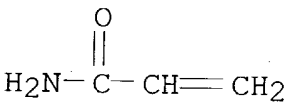
CM 2

CRN 107-13-1
CMF C3 H3 N



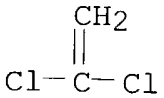
CM 3

CRN 79-06-1
CMF C3 H5 N O



CM 4

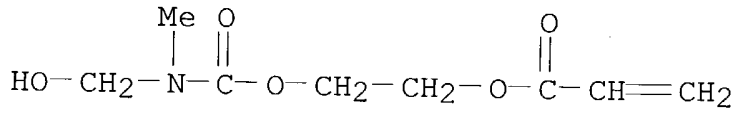
CRN 75-35-4
CMF C2 H2 Cl2



IT **66169-86-6**
(fire-resistant crosslinked)
RN 66169-86-6 ZCA
CN 2-Propenoic acid, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 1,1-dichloroethene, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

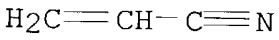
CM 1

CRN 65503-93-7
CMF C8 H13 N O5



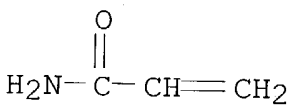
CM 2

CRN 107-13-1
CMF C3 H3 N



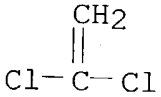
CM 3

CRN 79-06-1
CMF C3 H5 N O



CM 4

CRN 75-35-4
CMF C2 H2 Cl2



IT **66138-88-3**
(fiber, crosslinked fire-resistant)
IT **66169-86-6**
(fire-resistant crosslinked)

L9 ANSWER 23 OF 27 ZCA COPYRIGHT 2004 ACS on STN

88:74886 Crosslinkable polymers. Wolf, Gerhard Dieter; Schnoor, Werner; David, Karl Heinz; Reinehr, Ulrich; Nischk, Guenther (Bayer A.-G., Fed. Rep. Ger.). Ger. Offen. DE 2623128 19771208, 25 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1976-2623128 19760522.

AB CH2:CRCO2CH2CHR1O2CNMeCH2OH (I) (R and R1 = H or Me), CH2:CMeCO2CH2CH2O2CNHCH2OMe, CH2:CMeCO2CH2CH2N(CH2OH)CO2Me [65503-68-6], or 1 of 4 similar compds. was copolymd. with acrylonitrile (II), CH2:CMeCH2SO3Na (III), and, in 1 case, acrylamide to prep. crosslinkable copolymers useful as fibers, films, etc. Thus, a mixt. of water 7440, II 498.4, III 5.6, and I (R = R1 = Me) [65504-03-2] 56 parts was adjusted to pH 3.3 and polymd. at 50.degree. with a redox catalyst. The copolymer [**65504-04-3**] was dissolved in DMF and spun to prep. fibers which were treated with 0.5% aq. H2SO4 at 50.degree. to give crosslinked fibers which were insol. in DMF. I (R = R1 = Me) was prepd. from MeNCO [624-83-9], 2-hydroxypropyl methacrylate [923-26-2], and HCHO [50-00-0].

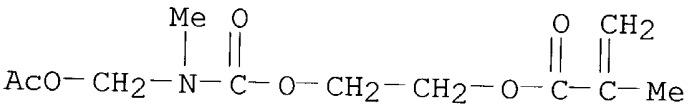
IT **65503-67-5 65503-92-6 65504-00-9 65504-02-1**
(crosslinked)

RN 65503-67-5 ZCA

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(acetyloxy)methyl]methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

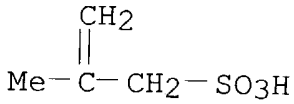
CM 1

CRN 65503-66-4
CMF C11 H17 N O6



CM 2

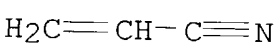
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

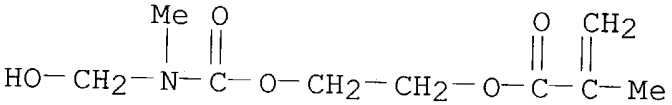
CRN 107-13-1
CMF C3 H3 N



RN 65503-92-6 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

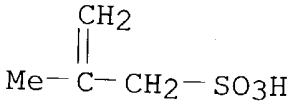
CM 1

CRN 65503-91-5
CMF C9 H15 N O5



CM 2

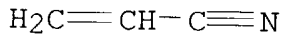
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

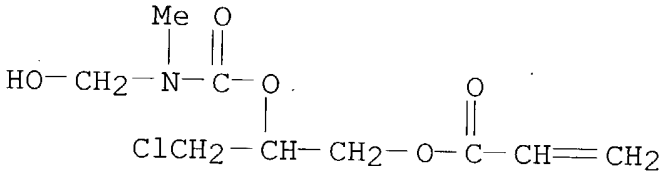
CRN 107-13-1
CMF C3 H3 N



RN 65504-00-9 ZCA
CN 2-Propenoic acid, 3-chloro-2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

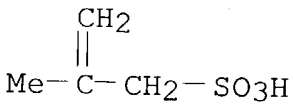
CM 1

CRN 65503-99-3
CMF C9 H14 Cl N O5



CM 2

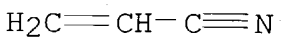
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

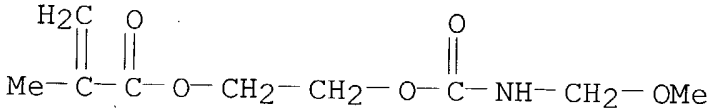
CRN 107-13-1
CMF C3 H3 N



RN 65504-02-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(methoxymethyl)amino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

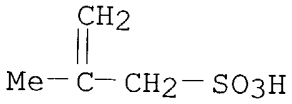
CM 1

CRN 65504-01-0
CMF C9 H15 N O5



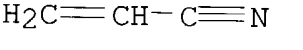
CM 2

CRN 1561-92-8
CMF C4 H8 O3 S . Na



CM 3

CRN 107-13-1
CMF C3 H3 N

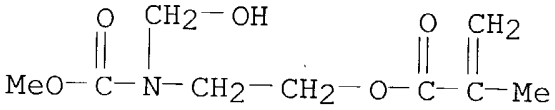


IT **65503-69-7 65503-71-1 65503-94-8 65503-96-0 65503-98-2 65504-04-3** (fiber, crosslinked)
RN 65503-69-7 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[(hydroxymethyl)(methoxycarbonyl)amino]ethyl ester, polymer with 2-propenenitrile and sodium

2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

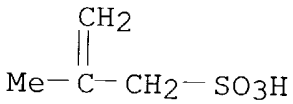
CM 1

CRN 65503-68-6
CMF C9 H15 N O5



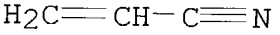
CM 2

CRN 1561-92-8
CMF C4 H8 O3 S . Na



CM 3

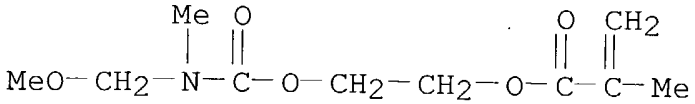
CRN 107-13-1
CMF C3 H3 N



RN 65503-71-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(methoxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

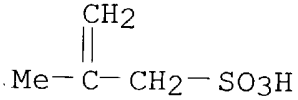
CM 1

CRN 65503-70-0
CMF C10 H17 N O5



CM 2

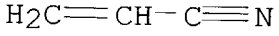
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

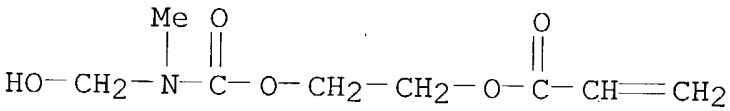
CRN 107-13-1
CMF C3 H3 N



RN 65503-94-8 ZCA
CN 2-Propenoic acid, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

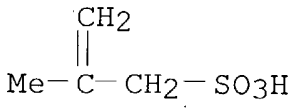
CM 1

CRN 65503-93-7
CMF C8 H13 N O5



CM 2

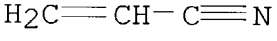
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

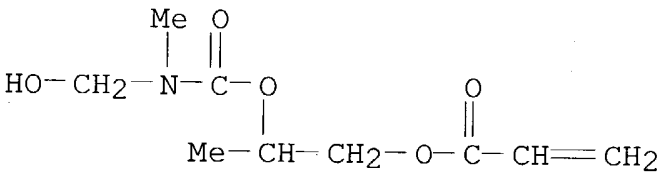
CRN 107-13-1
CMF C3 H3 N



RN 65503-96-0 ZCA
CN 2-Propenoic acid, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenamide, 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

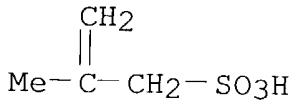
CM 1

CRN 65503-95-9
CMF C9 H15 N O5



CM 2

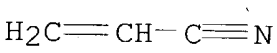
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

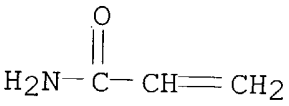
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 79-06-1
CMF C3 H5 N O

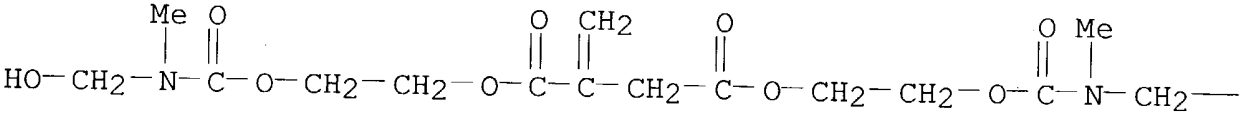


RN 65503-98-2 ZCA
CN Butanedioic acid, methylene-, bis[[[[(hydroxymethyl)methylamino]carbonyl]oxy]ethyl] ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 65503-97-1
CMF C15 H24 N2 O10

PAGE 1-A

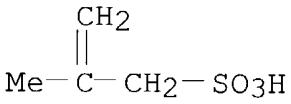


PAGE 1-B

—OH

CM 2

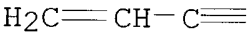
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

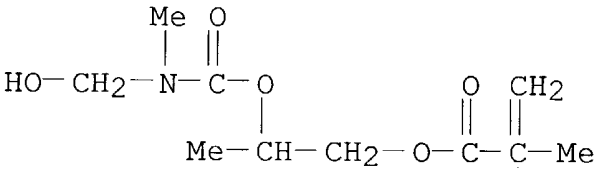
CRN 107-13-1
CMF C3 H3 N



RN 65504-04-3 ZCA
CN 2-Propenoic acid, 2-methyl-, 2-[[[(hydroxymethyl)methylamino]carbonyl]oxy]propyl ester, polymer with 2-propenenitrile and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

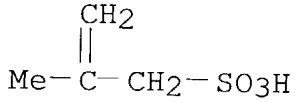
CM 1

CRN 65504-03-2
CMF C10 H17 N O5



CM 2

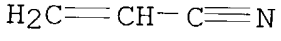
CRN 1561-92-8
CMF C4 H8 O3 S . Na



● Na

CM 3

CRN 107-13-1
CMF C3 H3 N



IT **65503-67-5 65503-92-6 65504-00-9 65504-02-1**
(crosslinked)
IT **65503-69-7 65503-71-1 65503-94-8 65503-96-0 65503-98-2 65504-04-3**
(fiber, crosslinked)

L9 ANSWER 24 OF 27 ZCA COPYRIGHT 2004 ACS on STN
85:6695 Purification of polymer dispersions with adsorbent carbon particles. Greenwald, Harold L.; Kine, Benjamin B. (Rohm and Haas Co., USA). U.S. US 3944513 19760316, 6 pp. (English). CODEN: USXXAM. APPLICATION: US 1974-457326 19740403.
AB Aq. dispersions of particulate vinyl polymers are freed of odor-producing and other impurities without causing coagulation and with no change of particle size by contacting the dispersion with active carbon particles at a temp. above the glass transition temp., Tg, of the dispersed polymer particles. Thus, an aq. 2:80:18 itaconic acid-ethyl acrylate-methyl methacrylate polymer [24980-96-9] dispersion prepd. by conventional emulsion polymer techniques, contg. 50% solids and having av. particle size 0.3.mu. and neutralized to pH 6.5 with NaOH, was passed through a water-wet, degassed fixed bed of activated petroleum coke at 25.degree., the coke having particle size 20-40 mesh, total surface area 1150 m2/g, pore vol. 0.66 cm3/g, and 54% of the pore vol. as pores with diam.

10-40.ANG.. The dispersion was much improved in odor, the pH was 6.5, and the volatile material content was greatly reduced. Similar results were obtained at 50.degree., the polymer particles having Tg <20.degree.. Coatings prepd. from the 2 treated dispersions had improved odor and better color stability. When the carbon dropped in efficiency it was purified by washing with hot aq. NaOH, by treatment with superheated steam at 150.degree., or by washing with hot aq. NaOH, rinsing, and steam treatment at 25 psi.

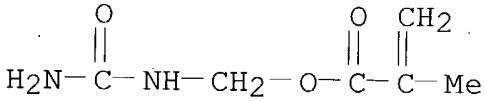
IT **59412-51-0**
(impurity removal from aq. dispersions contg., by adsorbent carbon particles)

RN 59412-51-0 ZCA

CN 2-Propenoic acid, 2-methyl-, polymer with [(aminocarbonyl)amino]methyl 2-methyl-2-propenoate, ethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

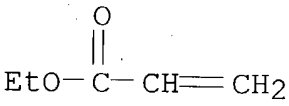
CM 1

CRN 59412-50-9
CMF C6 H10 N2 O3



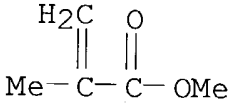
CM 2

CRN 140-88-5
CMF C5 H8 O2



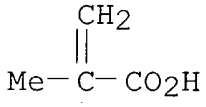
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IT **59412-51-0**
(impurity removal from aq. dispersions contg., by adsorbent carbon particles)

L9 ANSWER 25 OF 27 ZCA COPYRIGHT 2004 ACS on STN
79:79526 Photopolymerizable compositions containing ethylenically unsaturated compounds. Dart, Edward Charles; Nemcek, Josef (Imperial Chemical Industries Ltd.). Ger. Offen. DE 2251048 19730510, 53 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1972-2251048 19721018.

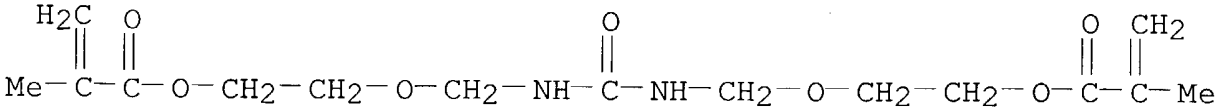
AB Dimethylaminoethyl methacrylate (I) [2867-47-2], triethylamine [121-44-8], tributylphosphine [998-40-3], allylthiourea [109-57-9], or a similar reducing agent is used with benzil [134-81-6], phenanthraquinone [84-11-7], .alpha.-naphthil [3457-41-8], or a similar light sensitizer to increase the photopolymn. rate during the crosslinking of unsatd. polyesters by styrene, the prepn. of an ethylene glycol dimethacrylate-methyl methacrylate polymer [25777-71-3], and other photopolymns. The sensitizer-reducing agent mixts. have low sensitivity to O. Thus, 263 parts 62:38 mixt. of fumaric acid-isophthalic acid-propylene glycol polymer [26249-22-9] and styrene contg. 2 parts benzil and 4 parts I gels in 15 sec in uv light, compared with 20 min when I is omitted.

IT **42033-76-1P**
(manuf. of, catalysts for photochem.)

RN 42033-76-1 ZCA
CN 2-Propenoic acid, 2-methyl-, 6-oxo-3,9-dioxa-5,7-diazaundecane-1,11-diyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 41650-76-4
CMF C15 H24 N2 O7



IT **42033-76-1P**
(manuf. of, catalysts for photochem.)

L9 ANSWER 26 OF 27 ZCA COPYRIGHT 2004 ACS on STN
68:60629 N-(Acryloxyalkyl)acylamide monomers and polymers useful as coatings, films, thickeners, or finishes for textiles, leather, paper, and plastics. Kelley, Everett J. (Rohm and Haas Co.). U.S. US 3366613 19680130, 7 pp. (English). CODEN: USXXAM. APPLICATION: US 1967-615362 19670213.

AB Monomers having the general formula H2C:C(R)CO2(CH2)xNHCOR1 (I) were prepd. I (R, x, R1, b.p./mm., and n20D given) are as follows: Me, 1, Me, 96-101.degree./0.5-0.75, 1.4700; H, 1, Me, -, -; Me, 2, H, 127.degree./1, 1.4782; and Me, 2, Me, 130-40.degree./1, 1.4705. They were prepd. by treating a methacrylic acid or acrylic acid halide or anhydride with an amino alc. of the formula R2COR3NR4OH, where R2 = Me, R3 = H, and R4 = CH2 or (CH2)2. The monomers can be homopolymd. or copolymd. in bulk, in soln., or in either emulsion or suspension. The polymers are useful as coatings or films, thickeners, and warp sizers or finishes for textiles, leather, paper, and plastics. Thus, 236 parts methacrylic anhydride was added during 0.5 hr. at 40-50.degree. to a mixt. contg. N-methylolacetamide 136, phenothiazine 0.77, and PhMe 272 parts. The mixt. was refluxed for 2 hrs. and distd. to give N-(methacryloxymethyl)acetamide (II), b0.5-0.7 96-101.degree., n20D 1.4700. II was homopolymd. by refluxing in C6H6 with 0.5% [Me2C(CN)N:]2 (III). A copolymer was prepd. by adding 67 parts PhMe to a flask and heating to 110.degree.. A monomeric mixt. catalyst soln. contg. Bu methacrylate 45, Me methacrylate 50, N-(methacryloxymethyl)acetamide 5, and III 0.5 part was added during 2 hrs. at 110-15.degree.. A catalyst soln. contg. 0.5 part III in 18 parts PhMe was added to the batch in 3 equal portions 2, 3, and 4 hrs. after the monomer addn. The mixt. was heated for an addnl. 3 hrs., cooled, and dild. with 58 parts PhMe to give a soln. contg. 40% solids. Degreased panels of cold-rolled steel, glass, Al, and steel primed with a com. alkyd primer were coated with the copolymer soln., dried at room temp., and baked for 30 min. at 150.degree. to give adherent, tough coatings. The coatings had good adhesion to steel in a dry state and even after soaking in H2O.

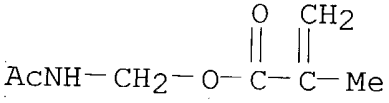
IT **29830-92-0**, uses and miscellaneous **29830-93-1**, uses and miscellaneous
(for coatings)

RN 29830-92-0 ZCA

CN Methacrylic acid, ester with N-(hydroxymethyl)acetamide, polymer with butyl methacrylate and methyl methacrylate (8CI) (CA INDEX NAME)

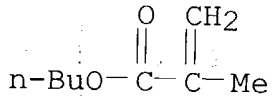
CM 1

CRN 16328-34-0
CMF C7 H11 N O3



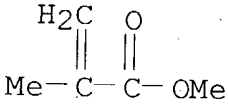
CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

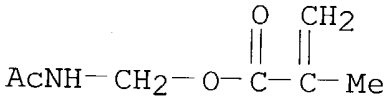
CRN 80-62-6
CMF C5 H8 O2



RN 29830-93-1 ZCA
CN Methacrylic acid, ester with N-(hydroxymethyl)acetamide, polymer with ethyl acrylate and methyl methacrylate (8CI) (CA INDEX NAME)

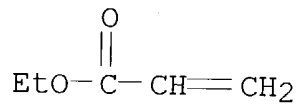
CM 1

CRN 16328-34-0
CMF C7 H11 N O3



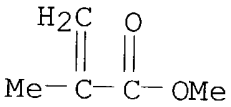
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IT **29830-92-0**, uses and miscellaneous **29830-93-1**, uses and miscellaneous
(for coatings)

L9 ANSWER 27 OF 27 ZCA COPYRIGHT 2004 ACS on STN
64:103647 Original Reference No. 64:19425f-h .alpha.,.beta.-Ethylenic N-alkylolamides. (Nobel-Bozel). NL 6507348 19651210, 17 pp. (Unavailable). PRIORITY: FR 19640609.

AB The title compds. were used in the finishing of cellulose textiles, as crosslinking agents or comonomers, and also as herbicides. Cryst. glyoxal 290 parts and 250 parts H2O was heated, Na2CO3 added to pH 6.5, and 583 parts of 97.5% acrylamide and 6 parts hydroquinone monomethyl ether added. The mixt. was heated at 40.degree., NaHCO3 added to pH 7.5-8, and the temp. maintained at 40-5.degree. while stirring and maintaining the pH at 7.5-8 until the reaction ended. After cooling, keeping several hrs. at 5.degree., decanting the solvent and drying in vacuo at 40.degree., 773 parts crude bis(acrylamido)-N,N'-ethylene glycol (I) (m. 146.degree., 0.97 double bond/100 g. and no free CHO-groups present) was obtained. I may be copolymd. with vinyl acetate to yield copolymers which are very resistant to org. solvents. A mixt. of 220 parts crude 97-98% I, 2.2 parts Na3PO4, and 265 parts 39% formol in H2O was heated at 60.degree. with stirring, the pH being maintained at 8.5 by Na2CO3 addns. When the reaction was ended, the mixt. was cooled and filtered to yield 480 parts of a soln. (II) of (bisacrylamido)-N,N'-ethylene glycol-N-methylol contg. 14.2 free HCHO and 0.44 double bond/100 g. II was used to render cellulose fabrics crease-resistant. E.g., fabrics were treated with an aq. soln. contg. 100 g./l. II and 20 g./l. MgCl2, dried 10 min. at

90.degree. followed by impregnation with an aq. soln. of 10 g./l. (NH4)2S2O8 and drying 5 min. at 150.degree.. Acrylamido-N-glycolic acid (III), m. 95%, was also prepd. by using glyoxylic acid in the place of glyoxal in the first example and acidifying with concd. HCl after the described condensation. III may be copolymd. and is used in the form of salt or free acid in herbicidal compns.

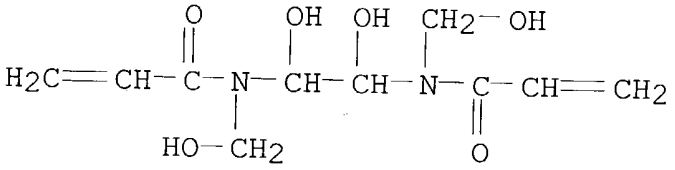
IT **618098-16-1**, Acrylamide, N-(hydroxymethyl)-N,N'-(1,2-dihydroxyethylene)bis-, homopolymer
(prepn. of)

RN 618098-16-1 ZCA

CN Acrylamide, N-(hydroxymethyl)-N,N'-(1,2-dihydroxyethylene)bis-, homopolymer (7CI) (CA INDEX NAME)

CM 1

CRN 6737-22-0
CMF C10 H16 N2 O6



IT **618098-16-1**, Acrylamide, N-(hydroxymethyl)-N,N'-(1,2-dihydroxyethylene)bis-, homopolymer
(prepn. of)